

# DRAFT ENVIRONMENTAL ASSESSMENT

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## *ALBENI FALLS PROJECT MASTER PLAN BONNER COUNTY, IDAHO*



December 2017



Seattle District  
Corps of Engineers

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B – Draft Finding of No Significant Impacts (D-FONSI)

## ACRONYMS AND ABBREVIATIONS

AFD	Albeni Falls Dam
APE	Area of Potential Effect
BLM	Bureau of Land Management
BO	Biological Opinion
BPA	Bonneville Power Administration
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
Corps	United States Army Corps of Engineers, Seattle District
DM	Design Memorandum
EA	Environmental Assessment
EIS	Environmental Impact Statement
elevations	For AFD, the jurisdictional line for both the Clean Water Act and the Rivers and Harbors Act is the OHW located at 2,062.5 feet MSL NGVD 29. On newer maps, land elevations have been corrected to NAVD 88. In Idaho, the conversion from older map datum to the newer datum is elevation NGVD 29 + 3.88 ft = elevation in NAVD 88. Therefore, OHW of 2062.5 ft NGVD 29 is 2066.4 ft NAVD 88. To lessen confusion, elevations in the body of this document are in NGVD 29 as that is the recorded jurisdictional line.
EO	Executive Order
EP	Engineering Pamphlet
ER	Engineering Regulation
FCRPS	Federal Columbia River Power System
FONSI	Finding of No Significant Impacts
IDEQ	Idaho Department of Environmental Quality
IDFG	Idaho Department of Fish and Game
MBTA	Migratory Bird Treaty Act
MP	Master Plan
MSL	mean sea level
NAGPRA	Native American Graves Protection and Repatriation Act

NAVD 88	North American Vertical Datum 1988
NEPA	National Environmental Policy Act
NGVD 29	National Geodetic Vertical Datum 1929
NHPA	National Historic Preservation Act
OHW	Ordinary High Water
OMP	Operational Management Plan
Panhandle Region	Defined by Idaho state agencies and is comprised of the following counties: Boundary, Bonner, Benewah, Kootenai, and Shoshone.
PL	Public Law
Project	Albeni Falls Dam and Reservoir Project
SHPO	State Historic Preservation Office / Officer
SLOPES	Standard Local Operating Procedures for Endangered Species
sp. / spp.	species (singular / plural)
THPO	Tribal Historic Preservation Office / Officer
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
WMA	Wildlife Management Area

# *ALBENI FALLS PROJECT MASTER PLAN: DRAFT ENVIRONMENTAL ASSESSMENT*

## **1 INTRODUCTION**

This environmental assessment (EA) considers and describes potential environmental effects of the development and adoption of a Master Plan for management of natural, cultural and recreational resources at Albeni Falls Dam and Reservoir Project (AFD). The new Master Plan would be a strategic land use management document that guides the comprehensive management and development of all project recreation, natural and cultural resources throughout the life of the water resource project. The new Master Plan would promote the efficient and cost effective management, development, and use of project lands. It is a vital tool for the responsible stewardship and sustainability of project resources for the benefit of present and future generations.

Although there are multiple municipal and private property owners adjacent to the various Corps properties, the scope of the revised Master Plan and EA is limited to actions on the Corps of Engineers' property. The only exception being the consideration of potential cumulative effects associated with actions off of Corps of Engineers property.

The Master Plan provides guidelines and direction for future project development and use and is based on authorized project purposes, Corps policies and regulations on the operation of Corps projects (Corps 1985, Corps 1996, Corps 2013), responses to regional and local needs, resource capabilities and suitable uses, and expressed public interests consistent with authorized project purposes and pertinent legislation. The Master Plan provides a District-level policy on use of Project lands consistent with national objectives and other state and regional goals and programs.

As required by the National Environmental Policy Act (NEPA) and subsequent implementing regulations promulgated by the Council on Environmental Quality (CEQ), this Environmental Assessment (EA) is prepared to determine whether the action proposed by the U.S. Army Corps of Engineers (Corps) constitutes a “. . . *major Federal action significantly affecting the quality of the human environment* . . .” and whether an environmental impact statement is required. The EA is prepared pursuant to NEPA, CEQ regulation (40 CFR, 1500-1517), and the Corps' implementing regulation, Policy and Procedure for Implementing NEPA, Engineering Regulation (ER) 200-2-2 (Corps 1988). The EA covers the action of adopting the proposed Master Plan. Future site-specific development, operations and maintenance actions that may transpire following adoption of the Master Plan, will undergo separate (tiered) analysis as required by NEPA.

The National Environmental Policy Act is a full disclosure law, providing for public involvement in the NEPA process. All persons and organizations that have a potential interest in major actions proposed by a federal agency – including other federal agencies, state and local agencies, Native American tribes, interested stakeholders, and minority, low-income, or disadvantaged populations are encouraged to participate in the NEPA process.



The new Master Plan would guide the Corps' responsibilities pursuant to Federal laws to preserve, conserve, restore, maintain, manage, and develop the project lands, waters, and associated resources. The Master Plan would be a dynamic operational document projecting what could and should happen over the life of the project and is flexible based upon changing conditions. The Master Plan would deal in concepts, not details, of design or administration. Detailed management and administration functions will be addressed in a 5-year Operational Management Plan (OMP), which implements the concepts of the Master Plan into operational actions. Tiered analysis of the OMP is the primary way that future detailed, site specific actions would be addressed fully under NEPA.

The Master Plan would not address flood risk management procedures and functions, including operations and maintenance of the earthen dam, levees, diversion or division structures, and emergency flood operations.

### 1.1 PROJECT LOCATION AND AUTHORITY

Albeni Falls Dam is part of the Columbia River system, providing storage for 15 downstream Federal and non-Federal hydroelectric projects on the Columbia and Pend Oreille Rivers. Its specific power operations are under the direction of the Bonneville Power Administration (BPA) to help meet Federal system elective power needs. The dam is on the Pend Oreille River in Bonner County, Idaho, just east of the Washington-Idaho border, approximately 50 miles northeast of Spokane, Washington and 25 miles west of Sandpoint, Idaho (Figures 1 and 2).



Figure 1. General location of AFD and the Pend Oreille Basin.

The Albeni Falls Dam project was authorized under the Flood Control Act of 1950 (Public Law 516, 81<sup>st</sup> Congress, 2<sup>nd</sup> Session) in accordance with Senate Document 9, 81<sup>st</sup> Congress, 1<sup>st</sup> Session, as part of a comprehensive plan for the development of the Columbia River System. Section 4 of the Flood Control Act of 1944 (Public Law 78-534), as amended, authorized the Corps to construct, maintain, and operate public parks and recreational facilities in reservoir



areas under Corps control, and to permit the construction, maintenance, and operation of such facilities. The Flood Control Act of 1962 amended the 1944 authority to include all water resources projects. Albeni Falls Dam has five authorized project purposes, which are hydropower, flood risk management, navigation, recreation, and the conservation of fish and wildlife.



**Figure 2. AFD location in northern Idaho.**

Construction of Albeni Falls Dam impounded a natural lake and increased storage behind the dam. This reservoir includes the top 11 feet of Lake Pend Oreille and 29 miles of the Pend Oreille River between the dam and the lake. The reservoir is a federal storage facility with an overall size of 94,600 acres and a maximum depth of 1,237 feet. The reservoir is 68 miles long, with a maximum width of 6-1/2 miles and an average depth of 545 feet. The reservoir fills a deep glacial valley that separates three mountain ranges: the Cabinets; the Selkirks; and the Coeur d'Alenes, with peak elevations in the three ranges up to 6,500 feet. For about 65 miles of the lake's 226 miles of shoreline, these mountains rise dramatically from the reservoir's edge. The reservoir pool is held to the ordinary high water (OHW) elevation of 2062.5 feet mean sea level (MSL) in the summer months, and is dropped down to approximately 2051 feet in the fall through spring run-off. The jurisdictional line for both the Clean Water Act and the Rivers and Harbors Act is the OHW located at 2,062.5 feet MSL North Geodetic Vertical Datum 1929 (NGVD 29)<sup>1</sup>.

<sup>1</sup> On newer maps, land elevations have been corrected to North American Vertical Datum 1988 (NAVD 88). In Idaho, the conversion from NGVD 29 to NAVD 88 is 3.88 feet (NGVD 29 + 3.88 ft = NAVD 88). Therefore, OHW of 2062.5 ft NGVD 29 is 2066.4 ft NAVD 88. To lessen confusion, elevations in the body of this document are in NGVD 29.

## **1.2 BACKGROUND / PRIOR MASTER PLANS**

Master Plans provide guidance for future development and maintenance of recreation and wildlife management areas on Corps lands. They are required for civil works projects and other fee-owned lands for which the Corps of Engineers has administrative responsibility for management. A Master Plan is a planning document that deals in concepts, not in details of design or administration and it provides guidance for future development and maintenance of recreation opportunities. It is a vital tool for responsible stewardship and sustainability of the facility's resources for the benefit of present and future generations. This Master Plan guides and articulates the Corps' responsibilities pursuant to federal laws to preserve, conserve, restore, maintain, manage, and develop the land, water, and associated resources. This Master Plan does not address regional water quality, water level management, shoreline management, or the operation and maintenance of project operations facilities (i.e. dam, powerhouse, and/or spillway). The plan is flexible and subject to revisions as dictated by changing needs and conditions.

### **1.2.1 Master Plan for Development and Management of Albeni Falls Reservoir, 1955**

The first Master Plan for the Albeni Falls Project was completed in 1955 (Corps 1955), and it was the initial document developed for natural resources and public use at the Project. The Master Plan was approved with the stated purpose *"to provide a comprehensive guide for the development and management of all land and water areas of the Project."* The Master Plan considers management of project lands for primary project functions and provides for development and management of collateral resources. It recognizes the public and private facilities already in existence in the reservoir area and presents plans for such additional facilities as are essential for maximum sustained benefit to the public. The plan is flexible and subject to revision as dictated by changing needs and conditions (Corps 1955).

### **1.2.2 Design Memorandum 23B Master Plan for Development and Management of Reservoir Lands, 1964**

In 1964, the Master Plan was updated to contain plans for development, operation, and administration of Project lands and water areas for the best use of the land in the interest of the public. The new Master Plan included proposed recreational development of supplemental land acquired at Oden Bay, Trestle Creek, and Springy Point. The plan established the probable extent of public use over the life of the Project and a plan for development of facilities to meet these needs. Policies and procedures for administration and operation were set forth to assure preservation of the scenic, biological, and recreational resources and coordination with interested Federal, State, and local agencies. As before, the plan was intended to be flexible and would be revised to meet changing needs and conditions.

### **1.2.3 Albeni Falls Project Master Plan, Design Memorandum 25, 1981**

The 1981 Albeni Falls Project Master Plan provided an updated guide for the use, development, and management of the natural and manmade resources of the Project over the next 15 to 20 years. The master plan made specific recommendations designed to ensure that the resource use objectives, development and management measures, and general design criteria were adhered to and reflected in all subsequent planning, development, and management activities at the Project. These recommendations included maintenance and operations; cooperative planning with Federal, state, local and citizen interests; and amendment of the license between the Corps and Idaho Department of Fish and Game (IDFG).

## 1.3 PURPOSE AND NEED FOR CORPS OF ENGINEERS ACTION

### 1.3.1 Overview

Master plans are required for civil works projects and other fee-owned lands for which the Corps of Engineers has administrative responsibility for management of natural and manmade resources. Engineer Pamphlet (EP) 11-30-2-550 establishes guidance for the preparation of master plans. As stated therein, the primary goals of the master plans are to prescribe an overall land and water management plan, resource objectives, and associated design and management concepts, which:

- (1) Provide the best possible combination of responses to regional needs, resources capabilities and suitabilities, and expressed public interests and desires consistent with authorized project purposes;*
- (2) Contribute towards providing a high degree of recreation diversity within the region;*
- (3) Emphasize the particular qualities, characteristics, and potentials of the project; and*
- (4) Exhibit consistence and compatibility with national objectives and other state and regional goals and programs.*

The Master Plan is the basic document guiding Corps responsibilities pursuant to federal laws to preserve, conserve, restore, maintain, manage, and develop project lands, waters and associated resources. The Master Plan is a dynamic planning document that deals in concepts, not in details of design or administration.

### 1.3.2 Purpose and Need for the Updated Master Plan

The existing Albeni Falls Project Master Plan was completed in 1981, but there has been no comprehensive revision to the Master Plan in more than 30 years. As such, the current Master Plan provides an inadequate basis with which to evaluate contemporary proposals. A number of recreational amenities envisioned and described in the 1981 document were never constructed. In addition, there have been changes in demand for recreation and expansive adjacent population growth which dictates the need to update the Master Plan for the Albeni Falls Project.

The Corps' Master Plan policy, EP 1130-2-550 was updated in January 2013 (Corps 2013). Under the new guidance, not only was the 1981 Master Plan out of date, it no longer fulfilled the new Master Plan requirements. An updated Master Plan provides a comprehensive description of the project, a discussion of factors influencing resource management and development, identification and discussion of special problems, a synopsis of public involvement and input to the planning process, and descriptions of past, present, and proposed development.

The proposed revised Master Plan would also incorporate current Corps land use classification standards, include contemporary requirements mandated by federal environmental laws, and better reflect the Corps' Environmental Operating Principles, natural resource management mission, environmental stewardship, and ecosystem management principles.

## 2 PROPOSED ACTION AND ALTERNATIVES

### 2.1 IDENTIFICATION OF ALTERNATIVES

This section identifies a range of alternatives that may respond to the purpose and need identified in Section 1, above. A reasonable range of alternatives was initially considered and discussed at a comparable level of detail. The proposed update of the Master Plan is directed by specific Corps' policy which informs consideration of alternatives for strategic project development and management. Alternatives are screened out if they do not conform to policy and don't meet the stated purpose and need. The alternatives considered in this EA include:

- (1) No Action/No Change. Current management based on strategy and guidelines in the 1981 Master Plan;
- (2) Balanced Master Plan (Proposed Master Plan). An updated Master Plan based on new Corps' policy, balancing designed visitor use with environmental and cultural resource sustainability;
- (3) Master Plan Maximizing Natural Resource Preservation. An updated Master Plan focused on preservation of natural resources and deemphasizing recreational development, access and visitor use;
- (4) Master Plan Maximizing Recreation. An updated Master Plan focused on expanding access and visitor facility development and deemphasizing preservation of natural resources.

The alternatives considered are further described below.

#### 2.1.1 Alternative 1: No Action / No Change

The no action alternative being evaluated should be viewed as "no change" from current management direction or level of management intensity. Therefore, the "no action" alternative may be thought of in terms of continuing with the present course of action (under the existing Master Plan) until that action is changed (under a revised Master Plan). Because Master Plans provide the basis for evaluating contemporary recreation or land management proposals, the 1981 document does not account for the many substantial changes that have occurred. The existing Master Plan is capable of providing only minimal support to development and management of the project.

Under the no action alternative, development and management of the project area would likely take the same general direction outlined in the proposed updated Master Plan and therefore, would generally share the same environmental consequences. However, future developments or resource management policies would require approval on a case-by-case basis without the benefit of evaluation in the context of a revised overall plan.

#### 2.1.2 Alternative 2: Master Plan Balancing Visitor Use and Conservation of Natural Resources (Preferred Alternative)

The Proposed Balanced Master Plan alternative would seek to replace the 1981 Master Plan, balancing recreation/visitor use with conservation of natural resources. The Balanced Master Plan would address important updates in response to changes in regional demographics, recreation use and demand, amenities within the project, current environmental conditions, and pertinent laws and policies. The Preferred Alternative would provide strategic comprehensive management and development of all project recreational, natural, and cultural resources

throughout the life of the Corps project. It would also guide planning for efficient and cost-effective management and development for comprehensive use, responsible stewardship, and sustainability.

### **2.1.3 Alternative 3: Master Plan Maximizing Natural Resource Preservation**

This alternative would require development and implementation of a Master Plan comprehensive long-term strategy that would prioritize maintenance, operations and development for natural resource protection and preservation for the life of the project. Recreation development and use, multiple maintenance efforts for facilities, roads, trails and vegetation, and common access to some lands and waters would be restricted to protect plant, wildlife and fisheries species over other project uses. Project Regional Objectives and Land Classifications would be developed to emphasize protection of specific habitats, animals and plants. Land Classification would restrict access in some areas for the purpose of environmental resource protection. This plan would restrict public access on or around the reservoir and stream for the enhancement of fish and wildlife species.

### **2.1.4 Alternative 4: Master Plan Maximizing Recreation**

This alternative would develop and put into practice a Master Plan comprehensive long-term strategy to manage and utilize AFD project lands and waters for maximum recreation facilities development and visitor use on all lands for the life of the project. Many Land Classifications currently allow some recreational use. Under this alternative, Regional Objectives and Land Classifications would be developed to provide enhanced opportunity for Corps' and possibly commercial recreational development on all lands. The Land Classifications currently used for low density recreation and resource protection would be considered for change to alternate high density recreation and commercial development and use.

## **2.2 SCREENING OF ALTERNATIVES**

When screening alternatives, the Corps is obligated to consider the stated purpose and need (Section 1.3) and assure compliance with applicable laws/regulations and Corps' policies. The Corps developed the following general screening criteria for all alternatives considered:

- (A) Provide the best management practices to respond to regional needs, resource capabilities and suitability, changing use and expressed public interests consistent with authorized project purposes;
- (B) Protect and manage project natural and cultural resources through sustainable environmental stewardship programs; e.g. environmentally sensitive areas; protection of endangered species and critical habitat; and cultural resource protection.
- (C) Provide public outdoor recreation opportunities that support project purposes, public demands created by the project itself while sustaining balance with project natural resources;
- (D) Recognize the particular qualities, characteristics, and potentials of the project;
- (E) Provide consistency and compatibility with national objectives and other state and regional goals and programs;
- (F) Comply with specific requirements of Corps policy for Master Plan approval.

Table 1 illustrates screening of the four alternatives for each of the criteria described above. Alternatives are marked as "Y" (yes) if they meet the definition of the criteria and "N" (no) if they do not. Only the proposed Master Plan meets all criteria.



**Table 1. Alternative Matrix**

Alternative	Criteria					
	A	B	C	D	E	F
1 – No Action / No Change Master Plan	N	Y	N	Y	N	N
2 – Proposed Balanced Master Plan	Y	Y	Y	Y	Y	Y
3- Maximize Natural Resource Preservation Master Plan	N	Y	N	N	N	N
4 – Maximize Recreation Master Plan	N	N	Y	N	N	N

For Alternative 1 (No Action / No Change), the Corps would continue to use the 1981 Master Plan with its associated management practices, and not implement a Master Plan update. The 1981 Master Plan would not update a regional analysis of recreation and ecosystem needs, project resource capabilities and suitability, recreation program analysis, and cumulative effects assessment, which are essential to the balanced approach and requirements of current Corps' Master Plan policy. Although the Corps currently uses the 1981 Master Plan, the document does not fulfill all current Corps' requirements for an approved Master Plan. Alternative 1 will be carried forward in this analysis, providing a basis for comparison with other alternatives.

Alternative 2 (Balanced Master Plan) meets all the conditions of the stated purpose and need and responds to current Corps' policy and regulations. It provides the required analysis for regional needs, resource capabilities and suitability, and a comprehensive recreation program. Alternative 2 will be carried forward in this analysis as the Proposed Master Plan.

### 2.3 ALTERNATIVE REMOVED FROM FURTHER CONSIDERATION

Alternative 3, *Master Plan Maximizing Natural Resource Preservation* would include development and implementation of Master Plan documentation to prioritize management, operation and maintenance of Project lands and waters specifically to preserve natural resources. Alternative 4, *Master Plan Maximizing Recreation*, would include development and implementation of Master Plan documentation to prioritize enhancement and expansion of recreation use, programs and facilities. Neither Alternative 3 nor Alternative 4 fully respond to the purpose and need identified for this action. Of critical importance is the need to emphasize that an approved Corps' Master Plan would be stewardship driven and must seek to balance recreational development and use with protection and conservation of natural and cultural resources. These alternatives do not consider project-wide resource capability and suitability, and are not consistent with multiple use authorized project purposes. Alternatives 3 and 4 have, therefore, been eliminated from further consideration.

### 2.4 ALTERNATIVES CARRIED FORWARD FOR DETAILED ANALYSIS

#### 2.4.1 General

The following section generally describes Alternative 1, No Action / No Change, using the 1981 Master Plan and Alternative 2, the Proposed Master Plan. The 1981 Master Plan and draft Proposed Master Plan, written more than 35 years apart, were developed based on different regulations and Corps' policies. No comprehensive revision to the Master Plan has been

completed since 1981. Master Plans are conceptual planning documents that do not direct specific actions, such as ground disturbing activities that would cause direct impacts to recreation, natural and cultural resources. Using the 1981 Master Plan or the Proposed Master Plan would influence planning and management of the Project and how all resources are best administered. The Master Plans provide guidance for planning future work to meet resource objectives.

The 1981 Master Plan was based on guidance at that time. The document envisioned and described recreation amenities which were never constructed. The Master Plan also included an extensive resource inventory for the AFD Project and the surrounding area. The Proposed Master Plan would address management and policy necessary to accommodate regional and local changing conditions at AFD Project. Of substantial importance for the update is the change in recreation uses and the growing public demand for recreation and natural resources.

Although somewhat different in content, generally both documents utilize a standard practice of identifying resource objectives, land classifications, and designation of management units for recreation use potential, resource protection, and maintenance practices.

#### ***2.4.1.1 Land Allocation and Land Classification***

Land allocations at all Corps of Engineers Civil Works water resource projects are based on the Congressionally-authorized purpose for which the project lands were acquired. These are defined as Operations, Recreation, Fish and Wildlife, and Mitigation. At Albeni Falls, all Corps-owned lands are allocated as Operations because they are considered essential for the continued operation in accordance with authorized purposes which are hydropower, flood risk management, navigation, recreation, and the conservation of fish and wildlife. Albeni Falls does not have lands that were specifically authorized by Congress for recreation, fish and wildlife management, or mitigation. The lands comprising each individual Corps property have been further classified (“zoned”) to provide for development and resource management consistent with authorized purposes, the provisions of applicable regulations, and the specific features and amenities within each area.

#### ***2.4.1.2 Resource Objectives of Master Plans***

Resource objectives are realistically attainable outcomes for the use, development, and management of natural and manmade resources. Resource objectives are developed with full consideration of authorized project purposes, applicable Federal laws and directives, resource capabilities, regional needs, plans and goals of regional and local governmental units, and expressed public desires. These objectives enhance project benefits, meet public needs, and foster environmental sustainability.

#### ***2.4.1.3 Maintenance of Facilities and Area Lands***

As resource managers, the Corps is required to maintain and/or repair existing facilities and infrastructure to continue to provide a safe working and recreational environment. In addition the Corps is required to protect natural areas and natural resources.



### 2.4.2 Alternative 1 – No Action / No Change

The Albeni Falls Project Master Plan, Design Memorandum 25, was completed in June 1981. Project lands were zoned (classified) in accordance with a land use allocation plan, which included six categories of use: (1) Project Operations, (2) Recreation – Intensive Use, (3) Recreation – Low Density Use, (4) Wildlife Management, (5) Natural Area, and (6) Special Area. Fifteen general resource use objectives – statements that were specific to the Albeni Falls Project which specified the selected options for resource use, development, and management as determined through study and analysis of regional needs, resource capabilities and potentials, and public desires – were established for the Project. In addition, site-specific resource use objectives were established for individual project sites and areas within the Project.

#### 2.4.2.1 Land Classifications

- **Project Operations** – Lands designated to provide for safe, efficient operation of the project for those authorized purposes other than recreation and fish and wildlife.
- **Recreation-Intensive Use** – Lands designated as developed public use areas for intensive recreational activities by the visiting public.
- **Recreation-Low Density Use** – Lands designated as developed public use areas for low density recreational activities by the visiting public.
- **Wildlife Management** – Lands designated as habitat for fish and wildlife or for propagation of such species and where wildlife habitat maintenance or improvement is appropriate.
- **Natural Area** – Lands designated for preservation of scientific, ecological, historical, archeological, or visual values.
- **Special Area** – A zone (classification) established to identify non-project highway and railroad rights-of-way which traverse or are adjacent to fee title lands at the Vista Area.

#### 2.4.2.2 1981 Resource Objectives

- **General**
  - (1) Coordinated Planning – Coordinate with Federal, state, local, and citizen interests in planning for the use, development, and management of the scenic, cultural, recreational, and fish and wildlife resources of the Lake Pend Oreille complex.
  - (2) Environmentally Appropriate Facilities – Provide public use facilities that are environmentally sensitive.
  - (3) Cultural sites – identify and preserve significant and historical sites.
- **Esthetics**
  - (4) Manage to Increase Esthetic Quality – Plan all management actions with consideration for overall site quality and landscape esthetics
  - (5) Vegetative Specimens for Landscape Plantings – Select vegetative specimens for landscaping on the basis of their wildlife value, with appropriate considerations for esthetic appeal.
- **Recreation**
  - (6) Recreation Quality – As funds become available, upgrade recreation areas by reducing the maintenance and rehabilitation backlog.

- (7) Handicapped Access – Identify and complete the modifications necessary at public use areas to make them accessible by elderly, handicapped, and other disadvantaged groups.
- (8) Broad Range of Camping Facilities – Provide a broad and diverse range of camping opportunities for the visiting public within the project as a whole.
- (9) Day Use Recreation – Accommodate increasing day use activity in a manner compatible with other site activities while maintaining the integrity of the natural resources of the project.
- (10) Boat Access – Increase number of shoreline access sites available to boaters.
- (11) Boat Launches – Improve boat launches and related service facilities for both low and high-water access at several locations on Lake Pend Oreille.
- (12) Safe Water Recreation Functions – Provide an accessible and safe area for water surface recreation activities.
- (13) Interpretation – Prepare a plan for and implement a meaningful interpretative program which will create greater awareness, understanding, and appreciation of the project and its resources.
- **Wildlife**
  - (14) Wildlife Habitat (applicable to project lands not licensed for wildlife management to the IDFG) – Improve and provide adequate habitat for wildlife in a manner consistent and compatible with individual site resource objectives.
  - (15) Productive Fishery – Cooperate in the maintenance and enhancement of a high quality fishery in Lake Pend Oreille and the Pend Oreille River upstream from the Albeni Falls Dam.

#### ***2.4.2.3 Maintenance of Facilities and Area Lands***

Under the No-Action Alternative, operations, maintenance, and upkeep of existing facilities as well as the protection of natural areas and natural resources would still occur. This would include small scale construction projects conducted by Corps staff. Tasks would include:

- (1) Repair and maintenance of Corps owned buildings
  - Reroofing
  - Repainting
  - Electrical repair/replacement
  - Repair/replacement of plumbing
- (2) Road repair
- (3) Recreation Area maintenance and/or repairs
  - Vegetation plantings
  - Small (less than 300 linear feet) shoreline stabilization projects
  - Repair/maintain playground equipment
  - Improve or install lawn sprinkler systems
  - Install/replace/repair picnic tables
  - Repair/maintain boat ramps, and fishing piers
  - Install/replace boat tie-downs

#### 2.4.2.3.1 Repair and Maintenance of Buildings

Existing Corps owned buildings would be maintained or improved to continue functionality including a preventive maintenance program for all utility systems and equipment. The purpose of the program would be to provide requirements for the maintenance of facilities, ensure the safety of the general public and employees, and to ensure that equipment is continually operable. Routine tasks proposed would include reroofing of smaller structures (pump houses, picnic shelters, or restrooms), patching roofs of larger buildings, repainting, rewiring, replacement of failed electrical fixtures, replacing failed plumbing and plumbing fixtures. Major renovations, large reroofing projects, or total building replacement would not occur.

#### 2.4.2.3.2 Road Repair

Existing roads would be repaired in order to keep roads passable. This would include the filling of pot holes, or repaving of small sections. Complete repaving of roads or converting gravel roads to pavement would not occur.

#### 2.4.2.3.3 Recreation Area Maintenance and/or Repairs

*Vegetation Planting in Campgrounds* – Replanting shrubs and trees in the campground would continue as an ongoing effort to provide a visual break between sites, improve the aesthetics of the campground, and to provide shade for the campsites. Preferred species planted would have emphasis on native shrubs, conifers, and deciduous trees.

*Small (less than 300 linear feet) Shoreline Stabilization Projects* – Small erosion control or bank stabilization project would be completed on an as-needed basis to prevent further land loss and to maintain visitor safety. Most likely these projects would be completed at breakwaters, docks, and high impact areas. Depending on the location, and the type of stabilization necessary, either soft, hard, or a combination could be used. Typical soft measures would be coir logs, and typical hard measures would be rip-rap. To improve habitat, native willows (*Salix spp.*) or other riparian species would be included when possible. Top surfaces would be reseeded or revegetated with a native seed mix, such as Kootenai River seed mix or revegetated native shrubs.

*Repair/maintain playground equipment* – Existing playground would be maintained and/or repaired to provide a safe play environment. No major improvements or full replacement of equipment would occur.

*Improve or Install Lawn Sprinkler Systems* – In order to conserve water and to maintain existing lawns, underground sprinkler systems would be improved and failed systems would be replaced. Typical sprinkler systems are set in 6 to 12 inch trenches and have retractable sprinkler heads.

*Install/replace/upgrade picnic tables and table pads* – Existing picnic tables would be replaced with more durable models that are wheelchair accessible. In addition, concrete pads for the tables could be added to provide greater ease of access.

*Repair/maintain boat ramps, fishing piers, and pilings* – Boat docks, fishing piers, and pilings would be fully or partially replaced depending on wear and tear. This would

include replacement of the gravel between pre-cast concrete slabs and/or full replacement of the pre-cast concrete slabs. All materials utilized would be approved for use in aquatic environments, and work would be in the dry or when the water level is at its lowest elevation. If concrete is poured wet below OHW, it will be isolated from reservoir waters until fully hardened.

*Install/replace boat tie-downs* – Tie-downs for boats are constructed moorings that are augured holes approximately 12 inches in diameter, 36 inches deep, a large chain extended to the bottom, then filled with concrete. The top few links of the chain are left above surface to serve as the tie-down point. It is proposed that additional moorings be installed or unusable ones be replaced.

### 2.4.3 Alternative 2 – Updated Master Plan

The Proposed Master Plan alternative would seek to replace the 1981 Master Plan, providing up-to-date management planning that is compliant with Corps' policy. This Proposed Master Plan would address important updates in response to changes in regional demographics, recreation use and demand, amenities within the project, current environmental conditions, and pertinent laws and policies. The Proposed Master Plan alternative would provide strategic comprehensive management and development of all project recreational, natural, and cultural resources throughout the life of the Corps project. It would also guide planning for efficient and cost-effective management and development for comprehensive use, responsible stewardship, and sustainability. According to Corps' policy, without an approved Master Plan, funding for new recreational development, construction, consolidation or land use change would not be approved.

#### 2.4.3.1 Revised Land Classification

Land use classifications have been revised in subsequent years to the following:

- **Project Operations:** These are lands required for the dam and associated structures, administrative offices, maintenance compounds, and other areas used to operate and maintain the Project.
- **Recreation:** These lands are designated for intensive recreational use to accommodate and support the recreational needs and desires of project visitors. They include lands where existing or planned major recreational facilities are located; and allow for developed public recreation facilities, concession development, and high-density or high-impact recreational use.
- **Multiple Resource Management (MRM):** These are lands managed for one or more of the activities described in the following bullets:
  - **Recreation-Low Density:** These lands emphasize opportunities for dispersed or low-impact recreation use.
  - **Wildlife Management Area (WMA):** These lands are designated for wildlife management, although all project lands are managed for fish and wildlife habitat in conjunction with other land uses.
- **Environmentally Sensitive Area:** These are lands where scientific, ecological, cultural, or aesthetic features have been identified.
- **Flowage Easement:** These are lands for which the Corps does not hold fee title, but has acquired the right to enter onto the property in connection with the operation of the project. Flowage easements extends between 2062 and 2067.7 feet elevation MSL.

A summary of the land classifications and acreages (rounded to whole numbers) are given in Table 2. These acreages include both Corps owned (fee acres) and easements. Complete descriptions of the land classification categories are provided in Section 4.3 of the updated Master Plan, which is found in its entirety as Appendix A of this EA. Acreage below 2062 feet elevation are not classified for specific purposes such as Recreation, Operations, or Wildlife Management as they are seasonally flooded.

**Table 2. Land acreages and classifications of Corps owned properties or real estate easements**

<b>Land Classification</b>	<b>Total Acres</b>
Project Operations	77
Recreation	156
MRM – Wildlife Management Areas	3,955
MRM – Low Density Recreation	37
Environmentally Sensitive Areas *	3,074
Acres Below 2062 feet elevation (exposed during draw-down) *	2,933
Flowage easement	9,299
Note: * Due to an overlap in land classifications, the acreage for Environmentally Sensitive Areas and Below 2062 feet elevation are included in the totals for other classifications.	

#### **2.4.3.2 Resource Objectives of the Updated Master Plan**

The function of the updated Master Plan is broader than identifying potential development and use of recreational facilities. The Master Plan provides updated resource objectives for the stewardship of project resources, both natural and manmade. Resource objectives are realistically attainable outcomes for the use, development, and management of natural and manmade resources. Resource objectives are developed with full consideration of authorized project purposes, applicable Federal laws and directives, resource capabilities, regional needs, plans and goals of regional and local governmental units, and expressed public desires. These objectives enhance project benefits, meet public needs, and foster environmental sustainability.

The over-arching project-wide resource objective for AFD is to continue to provide benefits to the public from the congressionally authorized purposes of *"Flood Control, Navigation, Conservation, Recreation, and Power Generation."* These benefits should be provided in a safe, effective, and efficient manner. Navigation, originally authorized for the purpose of log transport (via raft, or floated by the current) to downstream mills, is not presently used.

Resource objectives for the Albeni Falls Dam and Lake Projects include:

- Continue the provision of project benefits, including hydropower, flood control, fish and wildlife, and recreation, throughout the life of the Project;
- Provide the best combination of resource uses and project operations to meet the needs of the public;

- Provide for the management of natural resources associated with the Projects to include the protection and preservation of native habitat, the protection of water quality, and the implementation of programs to manage wildlife species;
- Promote the public's use of the Project for both non-consumptive uses (e.g., hiking, wildlife viewing) and consumptive uses (e.g., fishing);
- Promote public education concerning the Projects' man-made and natural resources;
- Protect and conserve cultural resources;
- Conserve, protect, monitor, restore, and/or enhance habitat and habitat components important to the survival and proliferation of threatened, endangered, special status, and other regionally important species;
- Control shoreline erosion; and
- Prevent unauthorized use of government property through boundary management.

#### ***2.4.3.3 Development and Maintenance of Facilities and Area Lands***

Although major work is not proposed in the future, improving some existing facilities, a number of small-scale actions or developments are proposed under the updated Master Plan. All of the maintenance and repairs, presented in No Action alternative, Section 2.4.2.3, would occur, plus the following is proposed contingent on funding:

- Repair and maintenance of Corps owned buildings
  - Roof replacement
  - Electrical upgrades
  - Plumbing upgrades
- Repaving or improving road surfaces
- Recreation Area Improvements
  - Replace portable Park Offices with permanent structures
  - ADA compliant restrooms and/or shower facilities
  - Electrical service upgrades
  - Install new paved trails and walkways
  - Changing fence types on Park boundaries
  - Replace/improve playground equipment
  - Lighting along trails
  - Install/upgrade picnic tables and table pads
  - Install/replace docks, boat ramps, fishing piers, and pilings
  - Installation of one-way traffic control spike-barrier gates
  - Riley Creek septic system / sewer system upgrade
  - Install potable water at Trestle Creek

##### ***2.4.3.3.1 Repair and Maintenance of Buildings***

Existing Corps owned buildings could be upgraded or improved. This would include total roof replacement on larger buildings, building remodeling (moving walls, doors, or windows), and upgrades to electrical or plumbing systems. In addition these tasks could include upgrades in equipment in keeping abreast of modern needs and technologies.

##### ***2.4.3.3.2 Repaving or Improving Road Surfaces***

Existing gravel roads could be improved to paved surfaces or old paved roads could be replaced. Although paving reduces permeability, it also improves air quality by reducing dust. Typical proposed construction would include the preparation, placement, and



compaction of a sub-base layer, base course, and the surface finished with an asphaltic wearing course.

#### 2.4.3.3.3 Recreation Area Improvements

*Replace Park Office Structures* – Current Park Office (“Ranger Station”) buildings that are housed in portable structures at Albeni Cove, Priest River, and Springy Point, could be replaced with permanent structures. New proposed buildings would likely be a wooden structure on a concrete foundation, single story, approximately 200 square feet in size and would include a small restroom. Typical construction would include trenching to connect utilities (water, sewer, electrical, and telecommunication) and with foundations set below the frost line (approximately 6 feet deep).

*ADA Compliant restroom/shower facilities* – Existing restroom facilities would be remodeled to ADA compliant standards, or current facilities would be demolished and reconstructed in the same footprint. Of the 11 public restrooms, seven buildings are compliant and have compliant access paths, two are compliant but without compliant access paths and two are not compliant. The four partial or noncompliant restrooms requiring accessibility upgrades are in Albeni Cove, Springy Point, Priest River, and Trestle Creek Recreation Areas.

*Electrical Service Upgrades* – The existing electrical service to the campground (RV and camper hook-ups) could be upgraded to provide more power to the campground. This proposed upgrade would require running new wire to the campground, but the upgrades would not require new trenching. The upgrade would be installed through existing, below-grade conduit. In addition, the upgrade would not be expected to require the construction of a new substation.

*Install New Paved Trails and Walkways* – Installing new paved trails, or converting gravel paths to paved would improve access and safety for the visiting public. Project elements would include site mobilization and pre-construction erosion control including temporary signage and site preparation; the demolition and removal of existing trail materials or damaged concrete; and base course stabilization including the installation of road base and sand gravel to stabilize the soil beneath the new concrete. Concrete would be poured to a depth of approximately 6-inches with fiber mesh support. After construction was completed, site revitalization would include reseeding along repaired sites. Because of seasonal restrictions on placement of concrete, construction would take place in the spring and summer, unfortunately coinciding with the period of high visitor use. The Corps would ensure that access remains open during construction to minimize disruption to users and may construct a temporary gravel trail around the construction sites or reroute trail users along an alternate park trails.

*Change Fencing on Park Boundaries* – Existing wire boundary fences at the parks could be removed and replaced with chain-link. Replacement of the type of fence would also include new fence posts.



*Install or Improve Playground Equipment* – Existing playground equipment would be replaced, or new playgrounds would be installed to provide safe play space for younger park visitors. New or improved playgrounds would each be less than 0.2 acres in space.

*Lighting along Trails* – To improve safety during low-light or after dark, low voltage lighting systems along trails (gravel or paved paths) may be installed. Wiring for lights would be buried in shallow trenches, 12 to 18 inches deep, for additional safety. The light fixtures either would be free-standing or attached to existing posts.

*Install/replace docks, boat ramps, fishing piers, and pilings* – Full replacement or installation of all new recreational fishing/boating infrastructure could be constructed. Full replacement would include pilings. All materials utilized would be approved for use in aquatic environments, and work would be during approved in-water work windows. If concrete is poured wet below OHW, it will be isolated from reservoir waters until fully hardened.

*Installation of one-way traffic control spike-barrier gates* – Normal park operations have park gates locked at 10:00 PM, and reopened at 7:00 AM. After hours, such as in the case of an emergency, resident Park Attendants unlock the gates. The proposed installation of commercially produced one-way traffic control spike-barrier gates, would allow park visitors to exit after 10:00 PM, but vehicles would incur tire damage should they try to re-enter prior to the spikes being dropped at 7:00 AM. Proposed systems would be from those currently available on the open market which are either embedded in the road (flat surface), or above grade (speed bump).

*Riley Creek septic system / sewer system upgrade* – Riley Creek Recreation Area is not on a municipal sewer system. Currently, the RV dump station is undersized and must be pumped several times each summer. Because of the proximity to the river and Idaho Department of Environmental Quality (IDEQ) guidelines, the dump station cannot be enlarged, and due to chemicals that are often used to temporarily store wastewater in RVs, the waste cannot be dumped into a conventional septic system, but must be delivered to a municipal sewage treatment plant. Municipal sewer services are not available to date along Riley Creek Park Road, in the town of Laclede, nor are there immediate plans to construct a system (Bonner County Planning Department 2002). Therefore, until a system is designed and constructed, the Corps will continue to pump the RV dump station on an as-required basis.

*Install Potable Water at Trestle Creek* – Currently Trestle Creek Recreation Area does not have potable water. To provide potable water, either a well would need to be located and dug, or a potable water line would need to be trenched in and connected to the existing supply line approximately 600 feet away from the entrance.

## 3 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

### 3.1 INTRODUCTION

This section identifies and describes: (1) the affected environment – i.e. the Project recreation, natural and cultural resources which have the potential to affect or to be affected by the alternatives, and (2) what the effects on those resources might be with implementation of the alternatives. Although all existing resources within the Project area were initially considered, only those resources determined relevant to the proposed action were included in the affected environment analysis. The intent of the Master Plan is to develop a guide to the sustainable use of resources at the Project. It was not possible to define the exact nature of potential impacts prior to receiving proposals for specific management actions, such as construction of new facilities or vegetation management. As detailed plans are developed for specific actions, additional NEPA analysis would occur to either confirm or test less than significant effects, or if an EA or an Environmental Impact Statement (EIS) would be prepared.

#### 3.1.1 Alternative 1 – No Action/No Change Alternative

The No Action Alternative would continue to use the 1981 Master Plan as the planning document. There would be no change from the current management of Project resources and no impacts associated with current routine operation and maintenance activities. The 1981 Master Plan does not direct specific actions, but provides guidance for meeting resource objectives. However, the 1981 Master Plan does not meet current Corps policy. Inability to meet Corps policy would limit capability to complete some tasks for the improvement of management for Project resources. Some impacts identified in the following pages are caused because certain management actions would be limited.

#### 3.1.2 Alternative 2 – Proposed Updated Master Plan

The analysis in the following sections assumes changes that may occur in management would occur with adoption of the proposed Master Plan. During initial implementation of the Master Plan, when work is typically for operation and maintenance, there would be no impacts. As decisions are made that reflect changes in management, based on the proposed Master Plan, impacts are likely. Long-term, improvement of natural resources and visitor facilities through execution of the preferred alternative (proposed Master Plan) would result in beneficial impacts to recreation, natural resources and cultural resources at the Project. Implementation of Master Plan recommendations, based on updated information, expanded Resource Objectives and analysis, would improve overall management of Project resources.

#### 3.1.3 Summary of Environmental Effects

The following table (Table 3) summarizes the effects of the No Action/No Change Alternative and the proposed Updated Master Plan Alternative on project resources. General points of consideration for the tables are:

- Best Management Practices (BMP) are techniques used during ground disturbing activities and construction to avoid impacts to natural resources, cultural resources, or humans.
- "Corps Policy Change" refers to the 2013 Master Plan Policy requiring an approved Master Plan (EP 1130-2-550, Change 5).

- Emergency actions are not included in Table 3. These actions would require consultation and/or coordination with the appropriate agencies and Tribes.

**Table 3. Effects of the Proposed Alternatives on Project Resources**

<b>General</b>	<b>Land Classifications</b>	<b>Recreation</b>	<b>Fish</b>	<b>Wildlife</b>
<b>Alternative 1 – No Action / No Change</b>				
Routine activities would have minor or no impacts utilizing best management practices (BMPs). Inability to meet new Corps' policy limits capability to execute future program changes, resulting in adverse impacts (e.g., new recreation facilities).	Continuing classifications would not meet new Corps' policy guidelines and would limit the capability to execute future program changes, resulting in adverse impacts	No adverse impacts from routine maintenance and operation actions. Future development is limited by Corps' policy, resulting in long-term adverse impacts to resources and users.	No adverse impacts to resident fish.	No adverse impacts from routine maintenance and operation actions. Current habitat maintenance activities would be restricted by Corps' policy. Limiting maintenance programs would result in adverse impacts to habitat and associated wildlife species.
<b>Alternative 2 – Proposed Master Plan</b>				
Routine activities would have minor or no adverse impacts utilizing BMPs. Future management changes may result in minor short-term adverse impacts. Program changes would achieve beneficial impacts for project resources and users.	Classifications in four affected locations would change; however, land use would not change. Land classification aligns with past and current usage. Low density recreation would continue. Beneficial impacts for fish and wildlife habitat.	No adverse impacts from routine maintenance and operation actions. Modernization and upgrading may cause short-term minor adverse impacts during construction. Actions for improvement to wildlife and habitat would also cause beneficial impacts for users.	No adverse impacts to resident fish. Beneficial impacts would occur with land management techniques to meet objectives of improved habitat for fisheries..	No adverse impacts from routine maintenance and operation actions. Beneficial impacts would occur with land management techniques to meet objectives of improved habitat for sustainable wildlife populations.

Vegetation	Endangered Species	Cultural Resources	Water Quality
<b>Alternative 1 – No Action / No Change</b>			
No adverse impacts from routine maintenance and operations actions. Future vegetation maintenance program actions would be restricted by Corps' policy, creating long-term adverse impacts. Adverse impacts would occur to project vegetation, habitat and associated wildlife species.	No adverse impacts from routine maintenance and operation actions. Future development or program changes would be restricted by Corps' policy, creating long-term adverse impacts. Actions that may impact ESA species would be coordinated with appropriate agencies.	No adverse impacts from routine maintenance and operations actions. Future development or program changes would be restricted by Corps' policy, creating long-term potential adverse impacts. Actions that may impact cultural resources would be coordinated with Tribes and agencies and the Idaho SHPO with Section 106 of the National Historic Preservation Act (NHPA) and the Systemwide Programmatic Agreement (Systemwide PA).	No adverse impacts from routine maintenance and operation actions. Future development or program changes would be restricted by Corps policy, creating potential adverse impacts. Actions that may impact water quality would be coordinated with appropriate agencies.
<b>Alternative 2 – Proposed Master Plan</b>			
No adverse impacts from routine maintenance and operation actions. Enhanced vegetation management to meet sustainable habitat objectives would provide beneficial impacts.	No adverse impacts from routine maintenance and operations actions. Enhanced planning for sustainable resources would benefit ESA species. Some short-term minor adverse impacts may be anticipated. Proposed work would comply with Terms and Conditions in the 2013 SLOPES Biological Opinion.	No adverse impacts from routine activities at the Project. Possible adverse impacts from ground-disturbing work would be likely with future vegetation and recreation area improvements. Actions that would impact cultural resources would be coordinated with the Tribes and Idaho SHPO in accordance with Section 106 of the NHPA and the Systemwide PA.	No adverse impacts from routine maintenance and operation actions. Sustainable natural resource planning would provide beneficial impacts by improved vegetation management and recreation development.

### 3.2 LAND CLASSIFICATION / LAND USE

Land Classifications (zoning) are briefly described in Section 2.4.1.1 above, and fully described in the updated Master Plan (Appendix A). Land classifications for most of the individual Corps properties have not changed since the 1981 Master Plan. However, proposed construction or upgrades in four locations did not materialize over the subsequent 35 years and the classification change is the subject of this section. Only locations that have classification changes are described in this section, and summarized in Table 4 below.

**Table 4. Land Classification Changes**

Site	1981 Master Plan	Updated Master Plan
Strong's Island	Recreation – Low Density	MRM – Wildlife Management Area
Priest River WMA	30 acres Recreation – Low Density	MRM – Wildlife Management Area
Clark Fork WMA (includes Johnson Creek Recreation Area)	155 acres Operations 10 acres Intensive Recreation	59.43 acres Operations 8.81 acres MRM Low Density Recreation 96.76 acres MRM Wildlife Management Area
Oden Bay WMA	0.39 acres Recreation – low density (campground) 22 acres Recreation – low density (wildlife park)	all MRM – Wildlife Management Area

#### 3.2.1 Environmental Consequences – No Action / No Change

Under the No Action / No Change Alternative, land classifications at Strong's Island, and within Priest River, Clark Fork and Oden Bay WMAs would remain as described in the 1981 Master Plan, which has more emphasis on the areas being used for recreation. Proposed improvements at Johnson Creek Recreation Area (a sub-unit of Clark Fork WMA) and Oden Bay were not funded, and therefore never materialized. At the time the 1981 Master Plan was published, Strong's Island had boat-in primitive camping facilities; however, due to budgetary constraints, in 1982 these facilities were removed.

#### 3.2.2 Environmental Consequences – Updated Master Plan

With the adoption of the updated Master Plan, land classifications in the four areas would change; however, how the land is used would not change. Corps policy is that land classification should be consistent with use, and the classification as WMA allows for a holistic approach to land management.

Picnic and primitive camping areas on Strong's Island were removed in 1982 and the island has been managed for wildlife habitat ever since. Reclassifying Strong's Island, Priest River WMA, and Oden Bay from Recreation – Low Density to MRM – Wildlife Management Area preserves the scenic and wildlife values of the areas while allowing low density recreational use. Proposed development at Johnson Creek Recreation Area has not occurred and therefore reclassification from Intensive Recreation to Low-Density Recreation aligns the land classification with past and current uses. Similarly, the proposed recreational development in a portion of Oden Bay WMA

never occurred, and reclassification aligns the land classification with past and current uses as valuable wildlife habitat.

### 3.3 RECREATION

Eight recreation areas are owned by the Corps of Engineers, including four developed campgrounds/day-use areas, two day-use only areas, and two primitive access areas (Table 5). Albeni Cove, Priest River, Riley Creek, and Springy Point have a variety of day-use facilities and campsites with basic amenities (picnic tables, fire-rings, nearby potable water). In addition, Riley Creek campsites have water and power hook-ups at each campsite as well as three sites with full hookups for the park attendants. The other three campgrounds (Albeni Cove, Priest River, and Springy Point) do not have hookups at this time. The Vista Area and Trestle Creek are day-use areas only. Morton Slough and Johnson Creek (managed by the IDFG) provide primitive camping and boat launch facilities.

**Table 5. Corps recreational facilities on Lake Pend Oreille and the Pend Oreille River**

RECREATION AREA	SIGHTSEEING	PICNIC AREA	PICNIC SHELTER	FISHING	BOAT LAUNCH RAMP	SWIMMING	CAMPING	TRAIL
Albeni Cove	•	•			•	•	•	
Priest River	•	•	•	•	•	•	•	
Riley Creek	•	•	•	•	•	•	•	•
Springy Point	•	•		•	•	•	•	
Vista Area / Visitor Center (day-use)	•	•						•
Trestle Creek (day-use)	•	•		•	•	•		
Morton Slough	•	•		•	•			
Johnson Creek WMA	•	•		•	•			

#### 3.3.1 Environmental Consequences – No Action / No Change

The No Action / No Change Alternative would allow recreation activities, facilities and access maintenance on project lands to continue as current. There would be no adverse impacts from routine operation and maintenance of facilities, natural and cultural resources. Although maintenance of current recreational facilities would continue under the no action alternative, the 1981 Master Plan would not accurately reflect the current status of the facilities, changing use patterns, and future requirements. Recreation use would continue to varying degrees on the project, with some increase in visitation. According to Corps' policy, without an approved Master Plan consistent with current regulations, funding for new recreational development, construction, consolidation or land use change would not be approved. Adverse impacts could occur as future facility development for changing use is limited by Corps policy, absent of an updated Master Plan.



### 3.3.2 Environmental Consequences – Updated Master Plan

The proposed Master Plan would enable more efficient land management. The recreation needs of the public would be better accommodated through the implementation of the updated Master Plan. Future recommendations would be based on review of existing facilities, resource suitability, carrying capacity, environmental and social effects, trends and forecast of future demands. There would be beneficial impacts on recreation, not only from modernization and upgrading existing facilities, but also from increasing management of natural resources through some of the Master Plan recommendations. The proposed Master Plan would comply with current Corps policy that requires holistic planning.

As described in Section 3.2, changes in land classifications on Strong's Island, portions of Priest River, Oden Bay, and Clark Fork WMAs would not prevent use of these areas for recreation areas, but serves to align land classifications with past and current uses. The MRM classification allows for the designation of a predominant use with the understanding that other compatible uses may also occur (e.g. primitive camping or a trail in an area designated as Wildlife Management).

As project use changes and management is modified to meet changing use and presumably increased visitation, there would be short term, minor adverse impacts due to new or upgraded facilities and improved land management changes. The implemented updated Master Plan is expected to have beneficial impacts to socioeconomics, (population, economy, transportation, safety). The opportunity to provide future recreational access, while maintaining the undeveloped lands that characterize much of the project, would serve the community and attract tourists to the region.

## 3.4 FISH

The Clark Fork watershed, Lake Pend Oreille, and the Pend Oreille River provide habitat for a variety of native and nonnative fish. Cold-water species tend to occupy the deeper waters of the lake while the warm water species are more prevalent in the near-shore areas and the river. Prevalent species include kokanee (*Oncorhynchus nerka*), bull trout (*Salvelinus confluentus*), rainbow trout (*O. mykiss*), cutthroat trout (*O. clarkii*), bass (*Micropterus spp.*), whitefish (*Prosopium spp.*), perch (*Perca spp.*), and sunfish (*Lepomis spp.*). The significant sport fishery targets trout in the cooler waters and bass in the warmer areas. In the lake proper, the kokanee fishery had been closed in the past due to the decline in populations. However, with an ongoing increase in population, current regulations allow for 15 fish per day. Some native species include northern pikeminnow (*Ptychocheilus oregonensis*), peamouth (*Mylocheilus caurinus*), and redbreast shiner (*Richardsonius balteatus*). The only native salmonids are westslope cutthroat trout (*Oncorhynchus clarkii lewisi*), bull trout, pygmy whitefish (*Prosopium coulteri*), and mountain whitefish (*Prosopium williamsoni*) (IDFG, 2013).

### 3.4.1 Environmental Consequences – No Action/ No Change

Under the No Action / No Change Alternative, impacts to fisheries resources from operation and maintenance of recreation and wildlife lands would remain unchanged. Albeni Falls would continue to utilize Resource Objectives and Land Classifications as identified by the 1981 Master Plan. Resource management would continue on a case-by-case basis. Land and water uses would remain unchanged and management of the land and activities on Corps lands would be conducted as it has in the past. There would be no adverse impacts from routine operation

and maintenance of facilities, natural and cultural resources. BMPs would be used to eliminate or significantly reduce adverse impacts to aquatic resources from routine operation and maintenance of facilities, or small project construction.

### **3.4.2 Environmental Consequences – Updated Master Plan**

The updated Master Plan would not have impacts on resident fish and/or aquatic habitat. Under this alternative, the new Master Plan would enable more effective land management, protecting water quality by assuring forest and wetland habitats. The Master Plan would comply with Corps policy, and would provide analysis of use, demand, carrying capacity, environmental and social effects of proposed actions. Future management of natural resources and recreation access would create minor adverse impacts from vegetation and facilities management. These efforts would result in beneficial impacts, providing for sustainable use of reservoir resources and reduced long-term impacts to project resources. Impacts from long-term modifications to facilities or natural resources are likely to occur under this alternative in order to meet the changing needs of the recreating public and respond to the changing requirements of the updated resource objectives.

## **3.5 WILDLIFE**

The Lake Pend Oreille area supports a rich diversity and abundance of wildlife species. Seasonal fluctuations in wildlife numbers and diversity are significant due to the presence of large numbers of migratory wildlife that frequent the area. The following discussion is a summary of information regarding important wildlife features of the project environment. Distribution by habitats, seasonal abundance, and food requirements are major elements of the discussion.

The Corps directly manages wildlife habitat in recreations areas, and IDFG manages habitat on Corps lands that are within WMAs. Wildlife throughout Idaho is directly managed by IDFG. Wildlife is affected by a wide array of natural and human-caused impacts. Heavy human use in an area can displace certain species. Severe winters and depredation can have a major impact on many species. The Corps manages habitat for the success of multiple species. The current vegetative composition, form, and structure provides habitat for a variety of wildlife species, but may not provide all habitat needs. Any ongoing impacts to wildlife would occur primarily as a result of conflicting uses on project lands such as informal motorized recreational use on wildlife in environmentally sensitive areas. Most wildlife would avoid high density recreation areas, but could come into contact with humans in low-density recreation areas. All habitats would continue to be protected under these two alternatives.

### **3.5.1 Environmental Consequences – No Action / No Change**

Under the No Action alternative, wildlife populations would evolve from the existing condition in a natural process as habitat changes, as influenced by operation of MCP, and as human use changes. There would be no adverse impacts to wildlife species from routine operation and maintenance of facilities, natural and cultural resources using BMPs. Adverse impacts to wildlife would occur with increased human presence. The forecasted increase in visitation would adversely impact wildlife and associated habitat. Wildlife would likely move to alternative habitat areas, off project.

### 3.5.2 Environmental Consequences – Updated Master Plan

With the updated Master Plan, potential impacts to wildlife resources at AFD Project from operation and maintenance of facilities, visitor use or management of natural and cultural resources would be similar to No Action/No Change. Potential impacts to wildlife resources from influences outside AFD Project would be similar to the No Action/No Change alternative. Implementation of the Proposed Master Plan would utilize additional analysis to make changes for anticipated impacts from increased visitation and influences from outside of MCP. Using long-term balanced planning, this alternative would be more effective in protecting wildlife resources.

## 3.6 VEGETATION

### 3.6.1 Existing Conditions

#### 3.6.1.1 Coniferous Forests

Coniferous forests dominate the Lake Pend Oreille landscape. At higher elevations (above 3,500 feet), mature forests are dominated by Douglas fir (*Pseudotsuga menziesii*), western red cedar (*Thuja plicata*), and western hemlock (*Tsuga heterophylla*). At lower elevations near the water's edge, ponderosa pine (*Pinus ponderosa*), and western larch (*Larix occidentalis*) dominate, with western red cedar, Douglas fir, and grand fir (*Abies grandis*) also prevalent. Northern Idaho coniferous forests are highly diverse and typically include multiple coniferous species, along with deciduous species in many areas. Common deciduous trees in the area include paper birch (*Betula papyrifera*), aspen (*Populus tremuloides*), willow (*Salix spp.*), black cottonwood (*Populus trichocarpa*), and red alder (*Alnus rubra*). Most of the forests on Corps lands are second growth, ranging from 15 to over 100 years old. Forest understory is well established in open canopy forests. Alder (*Alnus spp.*), hawthorn (*Crataegus douglasii*), snowberry (*Symphoricarpos albus*), dogwood (*Cornus stolonifera*), and serviceberry (*Amelanchier alnifolia*) predominate. These areas are important nesting and feeding habitats for numerous large and small birds and mammals.

#### 3.6.1.2 Shrub-lands

A shrub-land is dominated by the shrub layer rather than trees. A shrub-land occurs as a climax structure when conditions are not conducive to tree growth, such as excessively wet conditions or poor soils. It occurs as an early seral community that will be replaced by forest on more hospitable sites. A meadow is typically maintained in herbs and grasses through selective management. Types of shrub-lands communities found on Corps lands include upland shrubs (hawthorn/snowberry), savannah (with ponderosa pine), meadows, and riparian (transition between cottonwood riparian vegetation and wetlands, dogwood/snowberry, alder/willow).

#### 3.6.1.3 Wetlands

Wetlands are areas that are inundated or saturated by surface or ground water at a magnitude, frequency, and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetland communities comprise approximately 69 percent of the 4,237 acres of fee lands, and provide valuable fish and wildlife food, cover, and nest sites. The 4,017 acres of project lands licensed for wildlife management to the IDFG are a combination of wetland and riparian communities. They

consist primarily of wet meadows, seasonal mud flats, shallow marsh, deep marsh, and submerged aquatic beds.

Aquatic vegetation found along shorelines of the lake and the river corresponds to water depth and form somewhat concentric rings. Floating-leaved pondweed (*Potamogeton natans*), watermilfoil (*Myriophyllum spp.*), bladderwort (*Utricularia spp.*), and other pondweed species (*Potamogeton spp.*) occur alone or in combination in shallow littoral zones (<6.5 feet). Yellow pond lily (*Nuphar polysepalum*) and water shield (*Brasenia schreberi*) are frequently present as monocultures in deep littoral zones. Large leaved pondweed (*Potamogeton amplifolius*), white stalked pondweed (*Potamogeton praelongus*), and Richardson's pondweed (*Potamogeton richardsonii*) are common in limnetic zones (>6.5 feet) (Jankovsky-Jones 1997).

Over the last decade, the amount of aquatic vegetation has become a concern for residents and visitors to the region. Excessive amounts of aquatic vegetation seasonally die and cause unpleasant odors and reduce dissolved oxygen concentrations in the water. Of particular concern is the invasive Eurasian watermilfoil (*Myriophyllum spicatum*), which was identified in the Pend Oreille River in 1998 and has been spreading ever since despite various eradication attempts.

#### 3.6.1.4 Emergent (Herbaceous) Vegetation

Herbaceous wetlands on project lands usually occur as a complex of monocultures dominated by sedges (*Carex spp.*), bulrushes (*Scirpus spp.*), creeping spikerush (*Eleocharis palustris*), and common cattail (*Typha latifolia*). Water lady's thumb (*Polygomim amphibium*) may occur on lake or pond shores. Grasslands and seasonally flooded wetlands are mostly dominated by the non-native reed canarygrass (*Phalaris arundinacea*) with occasional tufted hairgrass (*Deschampsia cespitosa*), bluejoint reedgrass (*Calamagrostis canadensis*), or sedges (*Carex spp.*) (Jankovsky-Jones 1997).

In recent years, the emergent wetland weed, flowering rush (*Butomus umbellatus*) has become a management concern in the lake and river system. Flowering rush was discovered in 2007 in Lake Pend Oreille at the Clark Fork Drift Yard (Johnson Creek WMA). The initial infestation was approximately 10 acres, but as of 2014, the plant can be found throughout the reservoir. In addition to flowering rush, yellow-flag iris (*Iris pseudacorus*), an escaped garden plant, is also a concern. Yellow-flag iris displaces native wetland vegetation as it expands into dense clumps that exclude other wetland species. The root system forms a dense mat which compacts soil and inhibits seed germination of other plants. Large iris populations may also reduce the habitat available to native fish and waterfowl.

### 3.6.2 Environmental Consequences – No Action / No Change

Under the No Action / No Change Alternative, vegetation management would continue as currently operated. Vegetation would change as growth occurs naturally over time. There would be minor impacts to vegetation from routine operation and maintenance using BMPs. Future improvement actions could be restricted by Corps policy. Adverse impact to vegetation would occur, including degradation of current site conditions, and potential for adverse impacts to wildlife, and water quality.

### 3.6.3 Environmental Consequences – Updated Master Plan

With adoption of the Proposed Master Plan, potential effects to vegetation from project operation and maintenance and visitor use would be similar to No Action/No Change. Implementation of the Proposed Master Plan would utilize additional analysis to make changes for anticipated impacts from increased visitation and influences from outside of AFD Project, such as the control of aquatic and terrestrial weeds. Using long-term balanced planning, this alternative would be more effective in protecting vegetation for wildlife resources and aesthetic.

## 3.7 THREATENED AND ENDANGERED SPECIES

### 3.7.1 Existing Conditions

Federally listed threatened or endangered species near AFD and project lands include one species listed as Endangered and three species listed as Threatened, one species as proposed Threatened, and one Candidate species (Table 6). In addition, the Pend Oreille River has been designated as Critical Habitat for bull trout by the USFWS. The Corps is required to consult with the USFWS on any management actions that might affect federally listed species.

**Table 6. Protected species potentially occurring on Corps lands.**

COMMON NAME	SCIENTIFIC NAME	LISTING STATUS	CRITICAL HABITAT
Bull trout	<i>Salvelinus confluentus</i>	Threatened	Designated
Canada Lynx	<i>Lynx canadensis</i>	Threatened	Designated – not on Corps lands
Woodland caribou	<i>Rangifer tarandus caribou</i>	Endangered	Designated – not on Corps lands
Grizzly bear	<i>Ursus arctos horribilis</i>	Threatened	Proposed
North American wolverine	<i>Gulo gulo luscus</i>	Proposed Threatened	N/A
Whitebark pine	<i>Pinus albicaulis</i>	Candidate	N/A

While several endangered/threatened animal and plant species may exist in habitats near the Corps lands, the bull trout is the only species known to be a resident. Management and Recovery Plan development for these species has been the responsibility of other federal and state agencies; Corps management is limited to ensuring that Corps activities do not disturb or affect habitats or the species themselves, thereby avoiding a 'take' situation in which a listed species or their habitat has been disturbed. Areas where threatened or endangered species are known to occur on project lands are classified as Environmentally Sensitive Areas under the Corps Land Use Classification system. Brief descriptions are provided below of the life history and preferred habitats of all the federally listed, proposed listed, and candidate species that could potentially occur.

#### 3.7.1.1 Bull Trout (*Salvelinus confluentus*)

In 1998, the Columbia River and Klamath River populations of bull trout were listed as a threatened species and in 2010 the previous (2005) critical habitat designation was revised to include the Pend Oreille River from the crest of Boundary Dam upstream 100.8 mi to Lake Pend Oreille (Long Bridge at Sandpoint, Idaho) (70 FR 63898). The



revision also added Lake Pend Oreille and much of the Clark Fork, the entirety of the Priest River to and including Priest Lake, and other tributaries to the Pend Oreille, Priest and Clark Fork rivers.

In response to the 2000 USFWS Federal Columbia River Power System (FCRPS) Biological Opinion (BO), the Corps initiated studies aimed at helping determine the necessity and feasibility of fish passage at AFD. The results of completed studies indicate that bull trout above AFD end up downstream of the dam either on their own volition or through entrainment. Once below the dam, they attempt to migrate back upstream to reach their natal spawning tributaries, cold-water refuge and forage habitat of Lake Pend Oreille. Because upstream passage is not available, bull trout are unable to migrate upstream and must remain in the shallow waters of the Pend Oreille River. In addition, because upstream passage is not available, sub-adult bull trout that could migrate out of tributaries below AFD are not able to migrate back to Lake Pend Oreille to rear to adults. In late summer, water temperatures below AFD rise to levels adverse to bull trout, which results in the annual mortality of bull trout below the dam.

According to USFWS (2002 and 2008), some of the Lake Pend Oreille bull trout demonstrate the most common migration pattern for adult bull trout by moving upstream from Lake Pend Oreille into smaller tributaries to spawn. However, adult bull trout may exhibit a downstream migration pattern where adult fish move downstream from a lake system and spawn either in a main stem river, or in a smaller tributary stream. This downstream migration pattern is believed to have occurred in the Pend Oreille River Basin by some fish in Lake Pend Oreille. These down-migrating adult bull trout would migrate out of Lake Pend Oreille, down the Pend Oreille River and then into tributary streams (upstream and downstream of AFD) to spawn, with the offspring eventually returning to the lake. With the exception of one remaining stock in the Priest River basin, this migration pattern however was eliminated with the construction and operation of AFD in 1952 (USFWS 2002). The remaining example of the life history is a bull trout stock that continues to spawn in the Middle Fork East River from Lake Pend Oreille (USFWS 2008). This stock is small and at high risk of extirpation. The Middle Fork East River is a tributary to the Priest River, which is upstream of AFD, but downstream of Lake Pend Oreille. Without upstream passage at AFD, Priest River fish or any other bull trout entrained below AFD will not complete their life cycle by migrating to tributaries to Lake Pend Oreille to spawn or use the cold-water rearing conditions in the lake.

#### 3.7.1.2 *Canada Lynx (Lynx canadensis)*

The distribution of lynx in Idaho is closely associated with the distribution of boreal forest and sub-alpine forests. Within these general forest types, lynx are most likely to persist in areas that receive deep snow and have high-density populations of snowshoe hares, the principal prey of lynx. Because of this habitat preference, they are not expected to be found in the lower valley areas of Lake Pend Oreille and the Pend Oreille River.

### **3.7.1.3 Woodland Caribou (*Rangifer tarandus caribou*)**

Historically, woodland caribou inhabited the forests of the northern United States from Maine to Washington State. This range for this species is now reduced to one small herd in the Selkirk Mountains of northern Idaho, eastern Washington and southern British Columbia. Caribou are generally found above 4000 ft elevation in Engelmann spruce/sub-alpine fir and western red cedar/western hemlock forest types. The Selkirk herd is reduced to approximately 25 to 30 animals that tend to stay mostly in the Canadian part of its range; therefore, caribou are not expected to be found in the lower valley areas of Lake Pend Oreille and the Pend Oreille River.

### **3.7.1.4 Grizzly Bear (*Ursus arctos horribilis*)**

Grizzly bears need a very large home range (50 to 300 square miles for females; 200 to 500 square miles for males), encompassing diverse forests interspersed with moist meadows and grasslands in or near mountains. It is generally reclusive and sensitive to human disturbance; interactions with humans, which do occur, are mainly in undeveloped or lightly developed areas, and then usually in the presence of nuisance attractions such as unsecured refuse. The bears are mostly solitary except during mating, and in the case of females rearing cubs. Grizzlies are omnivorous, foraging on berries, leaves, bulbs and roots as well as insects, small mammals, carrion, occasional larger mammals, and fish. They hibernate in winter after feeding heavily in late summer and fall to store reserves, and then emerge in spring and begin replenishing weight lost during hibernation. Because of the generally developed nature of the surrounding area (residents adjacent to site and camping and boating activities in area) and high degree of habitat fragmentation, no grizzly bear use of the area is expected.

### **3.7.1.5 North American Wolverine (*Gulo gulo luscus*)**

Wolverines are opportunistic feeders and consume a variety of foods depending on availability. They primarily scavenge carrion, but also prey on small animals and birds, and eat fruits, berries, and insects. Wolverines require large territories; the availability and distribution of food is likely the primary factor in determining wolverine movements and home range size. Wolverines travel long distances over rough terrain and deep snow, and adult males generally cover greater distances than females. Because of the generally developed nature of the surrounding area (residents adjacent to site and camping and boating activities in area) and high degree of habitat fragmentation, no wolverine use of the area is expected.

### **3.7.1.6 Whitebark Pine (*Pinus albicaulis*)**

Whitebark pine occurs in high-elevation cold conditions in both the northern and southern parts of Idaho. Ecologically, whitebark pine is important, as its seeds are a valued wildlife food for birds, squirrels, black and grizzly bears. The pine is important in reducing avalanche potential, and soil erosion. It is the only tree species that will grow in some locations (high alpine). Whitebark pine, like western white pine, is very susceptible to the introduced white pine blister rust disease. Stands have also declined as a result of fire suppression efforts and mountain pine beetle attacks, which has allowed subalpine fir (*Abies lasiocarpa*) and Engelmann spruce (*Picea engelmannii*) to increase on many sites with the whitebark pine. These species can continue to grow in the shade of other trees, but the whitebark pine does not tolerate as much shade and over time is replaced. Due to



this plant's preference for high alpine habitats, it is not expected to be found along the lower elevations along Lake Pend Oreille and the Pend Oreille River.

### **3.7.1.7 Other Species of Concern**

In addition to the federally listed species, several state state-listed threatened, endangered, or sensitive species may occur on or utilize project lands and waters. These species were identified through The Idaho Conservation Data Center (ICDC), and IDFG databases. Approximately 50 species of vascular plants and mosses listed by the State occur in Bonner County. As a complete inventory has yet to be conducted on Corps lands, it is not known how many of these species could occur. Over 60 species of animals that are potentially present on Corps lands are ranked Priority 1 or Priority 2 by the State,<sup>2</sup> including 23 birds, 9 mammals, 3 fish, and 2 reptiles. While specific inventories have not been conducted to verify the presence of some of the listed animals, their presence has been documented through sightings and other data (for example, the northern alligator lizard and common loon are known to exist on Corps lands based on sightings).

### **3.7.2 Environmental Consequences – No Action / No Change**

The No Action / No Change Alternative would there would be no adverse impacts from routine operation and maintenance of facilities, natural and cultural resources on ESA listed species. The existing land classifications and resource objectives would not change. Requirements for ESA listed species are fulfilled pursuant to the Endangered Species Act and other associated regulations and executive orders.

### **3.7.3 Environmental Consequences – Updated Master Plan**

With adoption of the Proposed Master Plan, potential effects to threatened and endangered species from project operation and maintenance and visitor use would be similar to No Action/No Change. Necessary protection actions would be fulfilled pursuant to the Endangered Species Act and other associated regulations and executive orders. Alternative 2 is intended to enable efficient and improved land management over a long timeline. Implementation of the Proposed Master Plan would utilize additional analysis to make changes for anticipated impacts for fish and wildlife habitat in all project actions. Using long-term balanced planning, this alternative would be more effective in protecting ESA species.

To minimize impacts to the aquatic environment, projects would be limited in scope in accordance to the Standard Local Operating Procedures for Endangered Species (SLOPES) Biological Opinion (USFWS 2013), or any subsequent update.

## **3.8 CULTURAL RESOURCES**

Cultural resources are defined as sites, structures, objects, or practices that reflect prehistoric or historic habitation, and traditional knowledge and practices by humans. Cultural resources are non-renewable and therefore must be managed with sufficient care to ensure their preservation. The most common potential causes of loss of cultural resources include landscape modifications, erosion, vandalism, and artifact collecting. Through requirements of historic preservation policies in public laws, executive orders, and Corps regulations, it is the responsibility of the

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<sup>2</sup> "Priority 1" means critically imperiled because of extreme rarity or because some factor of its biology makes it especially vulnerable to extinction. "Priority 2" means imperiled because of rarity or because other factors demonstrably make it very vulnerable to extinction.

Corps to ensure the identification and protection of prehistoric and historic cultural resources located on project lands controlled and/or owned by the Corps. Albeni Falls Dam is a part of the Federal Columbia River Power System (FCRPS) program. At AFD there are approximately 416 recorded archaeological sites located along the shoreline of the Pend Oreille Lake and river. These sites are located on Corps land, other federal and state land and private property. In addition to the archaeological sites there are four historic districts: the east Pend Oreille Rock Art District, the Lake Pend Oreille Lime and Cement Industry Historic District, the Albeni Fall Dam Historic District, and the Upper Pend Oreille River Archeological District. All of the areas covered in the Master Plan contain archaeological sites. Cultural resources surveys in the Albeni Falls Dam area began in the 1950's and continue to the present day. Cultural resources at Albeni Falls Dam are addressed under Sections 106 and 110 of the National Historic Preservation Act (NHPA) and through the implementation of the Systemwide Programmatic Agreement for the Management of Historic Properties affected by the Multipurpose Operations of Fourteen Projects of the Federal Columbia River Power System for Compliance with Section 106 of the National Historic Preservation Act (Systemwide PA).

### **Built Environment**

In addition to the archaeological sites there are buildings and structures located at recreation sites, the Dam and the drift yard that are 50 years of age. The Albeni Falls Dam Historic District includes the dam, powerhouse, log chute, three bay garage and transformer/switchyard. Six of the recreation areas contain buildings 45 years or older. These structures consist of restrooms, pump houses, picnic shelters and storage buildings. For the Master Plan update buildings 45 years of age and older were inventoried and evaluated for inclusion on the National Register of Historic Places (NRHP). The Corps determined that none of these structures are eligible and have submitted this determination to the Idaho SHPO in a letter dated June 9, 2017.

#### **3.8.1 Environmental Consequences – No Action / No Change**

Under the No Action / No Change Alternative cultural resources would continue to be managed under the Systemwide PA. In accordance with the Systemwide PA, each routine operations and maintenance of facilities action would be evaluated to determine if the action would have an adverse effect on cultural resources and Section 106 consultation would occur if necessary.

#### **3.8.2 Environmental Consequences – Updated Master Plan**

Under the Updated Master Plan alternative, cultural resources would continue to be managed under the Systemwide PA. In accordance with the Systemwide PA, each routine operations and maintenance of facilities action would be evaluated to determine if the action would have an adverse effect on cultural resources and Section 106 consultation would occur if necessary.

### **3.9 WATER QUALITY**

Water control operations for the Federal Columbia River Power System impact reservoir resources at AFD Project, including water quality. Implementation of the No Action or Updated Master Plan Alternatives would not influence decisions related to reservoir operations. Impacts discussed below are correlated to management of natural, cultural resources and visitor access and facility use. Operations of the reservoir have adverse impacts on reservoir water quality, but are not within the purview of management discussed in these alternatives. Any construction or vegetation management activities would require analysis and coordination with regulating agencies to protect water quality.

### 3.9.1 Environmental Consequences – No Action / No Change

The No Action / No Change Alternative impacts related to water quality from operation of recreation and wildlife lands at AFD Project would remain unchanged. Requirements for water quality are fulfilled pursuant to the Clean Water Act and other associated regulations and executive orders. Routine maintenance actions, such as repair and maintenance of buildings, improving road surfaces, recreation area improvements, use of reservoir shoreline by the public, and vegetation maintenance, would use BMPs for all potential activities associated with possible impacts to water quality. Water quality and wastewater treatment management would remain the same. Future development or program changes would be restricted by Corps policy, creating potential adverse impacts.

### 3.9.2 Environmental Consequences – Updated Master Plan

The updated Master Plan would have no impacts from routine operation and maintenance of facilities, natural and cultural resources during initial implementation. The Master Plan would provide beneficial impacts from improved vegetation management and recreation development. With long-term balanced planning, this alternative would be more effective for protecting water quality through improved vegetation management and managed development. Water quality impacts from specific recreation and environmental management actions are anticipated to be minor. With any construction, or ground disturbing actions, BMPs would be used to reduce potential adverse impacts such as soil disturbance, turbidity, noise, etc. The updated Master Plan is intended to enable efficient and improved land management over a long time period.

Bank stabilization measures are functionally analogous to Nationwide Permit (NWP) 13, which authorizes bank stabilization activities necessary for erosion control or prevention. Activities include vegetative stabilization, bioengineering, sills, rip rap, revetment, gabion baskets, stream barbs, and bulkheads, or combinations of bank stabilization techniques, provided the activity meets all criteria in NWP 13. Stabilization activities shall involve the discharge of no more than 1 cubic yard per linear foot below OHW and no more than 300 linear feet<sup>3</sup> of activity along the bank.

Pursuant to the provisions of Section 401(a)(1) of the Clean Water Act, as amended; 33 U.S.C. Section 1341(a)(1); and Idaho Code §§ 39-101 et seq. and 39-3601 et seq., IDEQ has authority to review activities involving discharge of fill material subject to Section 404 of the Clean Water Act. IDEQ has issued a partial Clean Water Act Section 401 certification for activities covered under NWP 13, which states that if a pre-construction notification is necessary under the terms of NWP 13, then an individual 401 certification would be obtained from IDEQ. All other applicable DEQ requirements for water quality protection would be complied with for bank stabilization measures.

## 3.10 CLIMATE CHANGE

Indications are that average global atmospheric temperatures are trending upward over the previous several decades, and are correlated to increased atmospheric carbon dioxide levels (IPCC, 2001). Internal combustion engines emit carbon dioxide (CO<sub>2</sub>) as one byproduct of

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<sup>3</sup> Although NWP 13 allows 500 linear feet of construction, under 2013 USFWS Biological Opinion, construction is limited to **300** linear feet.

efficient burning of fuel (gasoline or diesel). International efforts are being directed at reducing carbon release into the atmosphere.

In the Pacific Northwest, changes in snowpack, stream flows and forest cover are already occurring. Future climate change will likely continue to influence these changes. Average annual temperature in the region is projected to increase by 3-10 degrees Fahrenheit by the end of the century. Winter precipitation in the form of rain not snow is projected to increase while summer precipitation is projected to decrease (EPA, 2016).

Reduced precipitation during the summer months would impact vegetation type and quantity, resulting in changes to wildlife habitat, including food sources, cover vegetation, and possibly reproduction areas. Higher temperatures would increase evaporation rates from the lake, lowering lake elevations, and increasing water temperature, impacting aquatic flora and fauna. Along with rising air temperatures, there would be a corresponding rise in stream temperature. This would likely reduce the quality and suitability of bull trout habitat in Lake Pend Oreille, the Pend Oreille River, and their tributaries. Some vegetation throughout the area would exhibit stress response to higher temperature and less precipitation that would adversely impact aesthetics.

### **3.10.1 Environmental Consequences – No Action / No Change**

There would be no effects to climate change as a result of using the No Action alternative. Gradual climate change would continue, in correlation with increasing CO<sub>2</sub> emissions worldwide. However, climate change does have the capability to cause effects to the Lake Pend Oreille watershed with the potential existing for a change in weather patterns (more rain and less snow in the winter).

### **3.10.2 Environmental Consequences – Updated Master Plan**

With adoption of the proposed Master Plan, potential effects to climate change and from climate change would be similar to No Action / No Change. As with the No Action alternative, climate change does have the capability to cause minor effect to the Lake Pend Oreille watershed with a change in weather patterns.

## **4 CONSERVATION MEASURES**

Following are conservation measures and Best Management Practices (BMPs) that will reduce impacts on the environment:

- The use of dust suppression methods to minimize airborne particulate matter that would be created during any ground disturbing activities. Additionally, all equipment and vehicles would be required to be kept in good operating condition to minimize exhaust emissions. Standard practices, such as soil watering, keeping storage piles covered when not in use, limiting dusty work on windy days or times of day would be used to control fugitive dust during the construction phase and during daily operations and maintenance of the proposed project.
- To avoid or minimize impacts to noise, all equipment and vehicles would have properly working mufflers and be kept in a proper state of tune to reduce backfires.

- Clearing and grubbing would be timed with construction to minimize the exposure of cleared surfaces. Such activities would not be conducted during periods of wet weather. Construction activities would be staged to allow for the stabilization of disturbed soils.
- Soil erosion-control measures, such as soil erosion-control mats, silt fences, straw bales, diversion ditches, riprap channels, water bars, water spreaders, and hardened stream crossings, would be used as appropriate.
- Provisions would be taken to prevent pollutants from reaching the soil, groundwater, or surface water. During project activities, contractors would be required to perform daily inspections of equipment, maintain appropriate spill-containment materials on site, and store all fuels and other materials in appropriate containers. Equipment maintenance activities would not be conducted on the construction site.
- Physical barriers and "no trespassing" signs would be placed around any excavation and/or construction sites to deter children and unauthorized personnel. All construction vehicles and equipment would be locked or otherwise secured when not in use.
- For projects involving in-channel or riparian disturbance (e.g., excavation or construction within the bank-full channel or a 35 ft buffer each side of channel) the in-water work window is July 1 through September 30.
- Stabilization activities shall not exceed 300 linear feet per continuous run of material.
- Stabilization activities shall involve the discharge of no more than 1 cubic yard per linear foot below ordinary high water (OHW).
- Rock riprap shall be individually placed without end dumping.
- No refueling of equipment will take place within 100 linear feet of OHW or the wetland boundary.
- Equipment must have a five gallon capacity spill kit on board at all times when working near water.
- All work should be performed in the dry when possible. Any work in flowing water must be completed by working from the top of the bank and work areas must be isolated from flowing or open water using cofferdams, silt curtains, sandbags or other approved means to keep sediment from entering flowing or open water, unless isolating the area and working in the channel would result in more habitat disturbance.
- Structural fills with materials such as concrete shall be placed into tightly sealed forms or cells that do not contact the waterway until fully cured.
- All construction impacts must be confined to the minimum area necessary to complete the project and boundaries of clearing limits associated with site access and construction will be clearly marked to avoid or minimize disturbance of riparian vegetation, wetlands and other sensitive sites.
- If native woody riparian vegetation must be removed for temporary access purposes, the vegetation must be cut flush with the ground surface or folded over. The root mass must be left intact, and any exposed soil must be reseeded with native grasses or forbs after construction is completed.

## 5 CUMULATIVE IMPACTS

The NEPA and the CEQ regulations require federal agencies to consider the cumulative impacts of their actions. Cumulative effects are defined as, "*the impact on the environment which results*

*from the incremental impact of an action when added to other past, present and reasonable foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions” (40 CFR § 1508.7).* Cumulative impacts can result from individually minor, but collectively significant actions taking place over a period of time. These actions include on- or off-site projects conducted by government agencies, businesses, or individuals that are within the spatial and temporal boundaries of the actions considered.

Numerous cumulative effects to the environment have occurred in the project areas from construction of Albeni Falls Dam and from the changes in the water behind it. The hydrology of Pend Oreille, Priest, Pack, and Clark Fork Rivers was altered, the dam and reservoirs displaced natural vegetation, and human presence and construction impacted resident and migratory species. Cultural resources were unearthed and disturbed during the construction as well. These anthropogenic changes have caused cumulative adverse effects to fish, wildlife, and vegetative communities.

Continued recreation and project upkeep at the facilities would have an on-going minor adverse impact on fish and wildlife in the immediate area. Construction and maintenance activities would temporarily create noise and dust in the area and could temporarily displace wildlife. Continued upkeep of the area, especially in the High Density Recreation Areas, would provide ongoing benefits to recreationalists. Corps staff will evaluate the construction of any new project under NEPA to see if they are categorically excluded from further analysis or if they require an EA to determine their impact on the environment. Site-specific proposals for construction will also be offered to the Tribes for consultation, in accordance with the PA, and will be approved only if it is determined that potential impacts are not significant. The Corps and non-Federal lessees will manage recreation areas and WMAs in accordance with pertinent environmental laws, which will reduce some of the wildlife and vegetation impacts to the area from human disturbance.

Future construction activities within the private sector also affects the environment in the Pend Oreille Lake and River area. As lakeside homes, for primary or secondary residences, will continue to be in high demand, it is anticipated that any undeveloped private land could be developed. This future development would have a negative effect on the habitat for fish and wildlife species, but would be considered a positive effect for the local economy.

The effects of wind and boat wakes is expected to continue to cause shoreline erosion issues for all waterside recreation areas, WMAs, residences, and businesses. To combat erosion, bankline hardening projects are likely to increase.

## 6 COORDINATION

Preparation of this EA was coordinated with appropriate Tribal, Federal, state, and local interests, as well as environmental groups and the regulated public. Coordination with these entities was conducted to ensure compliance with NEPA regulations:

- U.S. Fish and Wildlife Service
- Kalispel Tribe of Indians
- Confederated Salish and Kootenai Tribes



- Kootenai Tribe of Idaho
- Cœur d'Alene Tribe
- Idaho State Historic Preservation Office
- Idaho Department of Fish and Game
- Idaho Department of Environmental Quality
- Pend Oreille Basin Commission
- Bonner County Parks and Waterways Committee

## 7 ENVIRONMENTAL COMPLIANCE

This Environmental Assessment (EA) is being prepared pursuant to Sec. 102(C) of the National Environmental Policy Act (NEPA), and includes compliance with other laws, regulations and Executive Orders as discussed below.

### 7.1 AMERICAN INDIAN RELIGIOUS FREEDOM ACT

*In compliance.*

The American Indian Religious Freedom Act (42 U.S.C. 1996) protects the rights of Native Americans to exercise their traditional religions by ensuring access to sites, use and possession of sacred objects, and the freedom to worship through ceremonials and traditional rites. Implementing the revised Master Plan would not adversely affect the protections offered by this Act.

### 7.2 BALD EAGLE PROTECTION ACT

*In compliance.*

The Bald Eagle Protection Act (16 U.S.C. §668, *et seq.*) contains requirements on Corps of Engineers projects concerning bald eagles. Approval and implementation of the revised Master Plan would not adversely affect bald eagles or their habitat.

### 7.3 CLEAN AIR ACT

*In compliance.*

The Clean Air Act (CAA) as amended (42 U.S.C. §7401, *et seq.*) prohibits federal agencies from approving any action that does not conform to an approved State or federal implementation plan. The purpose of this Act is to protect public health and welfare by the control of air pollution at its source, and to set forth primary and secondary National Ambient Air Quality Standards to establish criteria for States to attain, or maintain. Minor and temporary releases would occur during construction activities for actions to maintain or improve facilities (e.g., fugitive dust, internal combustion engine emissions); however, these emissions would be short term, small-scale, and air quality would not be affected to any measurable degree.

### 7.4 CLEAN WATER ACT

*In compliance.*

The object of the Federal Water Pollution Control Act (33 U.S.C § 1252 *et seq.*), commonly referred to as Clean Water Act (CWA) is to restore and maintain the chemical, physical, and biological integrity of the nation's waters by preventing point and nonpoint pollution sources, providing assistance to publicly owned treatment works for the improvement of wastewater treatment, and maintaining the integrity of wetlands. Adoption of the proposed Master Plan does

not require or trigger compliance with the CWA. Future site specific actions will be reviewed for compliance with the Act.

## 7.5 ENDANGERED SPECIES ACT

*In compliance.*

In accordance with Section 7(a)(2) of the Endangered Species Act of 1973 (16 U.S.C. 1536) as amended, all Federal departments and agencies shall, in consultation with and with the assistance of the Secretary of the Interior (Secretary), insure that any actions authorized, funded, or carried out by them do not jeopardize the continued existence of any threatened or endangered (T&E) species, or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary to be critical.

This Environmental Assessment represents the assessment and findings regarding the proposed revised Master Plan serves as the Biological Assessment with a determination of **no effect** to Canada lynx (*Lynx canadensis*), woodland caribou (*Rangifer tarandus caribou*), grizzly bear (*Ursus arctos horribilis*), North American wolverine (*Gulo gulo luscus*), or whitebark pine (*Pinus albicaulis*) due to specialized habitat requirements, lack of tolerance for human activity, or both.

The findings for upland work allow a determination of **no effect** to bull trout (*Salvelinus confluentus*) or their designated critical habitat because there would be no change in the operations of the Albeni Falls Dam as a result of implementing the revised Master Plan. Further, any proposed operation, maintenance, or construction of in-water or below OHW work would be limited in scope in accordance to the USFWS' 2013 Standard Local Operating Procedures for Endangered Species (SLOPES) Biological Opinion (USFWS 2013). If a specific project does not meet the limitations or guidelines in SLOPES, then that project would be analyzed and separate Section 7 consultation will be completed prior to construction, as necessary.

## 7.6 FISH AND WILDLIFE COORDINATION ACT

*In compliance.*

The Fish and Wildlife Coordination Act of 1934 as amended (16 U.S.C. §661-667e) requires governmental agencies, including the Corps of Engineers, to coordinate activities so that adverse effects on fish and wildlife would be minimized when water bodies are proposed for modification. No modifications are proposed in association with the proposed update to the Master Plan.

## 7.7 MIGRATORY BIRD TREATY ACT OF 1918 AND EXECUTIVE ORDER 13186 MIGRATORY BIRD HABITAT PROTECTION

*In compliance.*

The Migratory Bird Treaty Act (16 U.S.C. §703-712) (MBTA) as amended protects over 800 bird species and their habitat, and commits that the U.S. will take measures to protect identified ecosystems of special importance to migratory birds against pollution, detrimental alterations, and other environmental degradations. EO 13186 directs federal agencies to evaluate the effects of their actions on migratory birds, with emphasis on species of concern, and inform the USFWS of potential negative effects to migratory birds.

A wide variety of species listed under the MBTA occur on Corps managed lands within the action area. There will be no take of migratory birds and this action will not conflict with the purpose of MBTA or EO 13186. The adoption of the proposed Master Plan would be in compliance with the MBTA and EO 13186.

## **7.8 NATIONAL ENVIRONMENTAL POLICY ACT**

*In compliance once this EA is finalized.*

The National Environmental Policy Act (NEPA) (42 U.S.C. §4321 et seq.) commits federal agencies to considering, documenting, and publicly disclosing the environmental effects of their actions. This Environmental Assessment, prepared November 2017, is intended to achieve NEPA compliance for the proposed project. As required by NEPA, this Draft EA describes existing environmental conditions at the project site, the proposed action and alternatives, potential environmental impacts of the preferred alternative and measures to minimize environmental impacts. The document determines if the Master Plan would create any significant environmental impacts that would warrant preparing an EIS, or whether it is appropriate to prepare a Finding of No Significant Impacts (FONSI). The Draft-FONSI is attached in Appendix B.

## **7.9 NATIONAL HISTORIC PRESERVATION ACT OF 1966**

*In compliance.*

Section 106 of the NHPA (16 U.S.C. 470) requires that Federal agencies evaluate the effects of Federal undertakings on historical, archeological, and cultural resources and afford the Advisory Council on Historic Preservation opportunities to comment on the proposed undertaking if there is an adverse effect to an eligible Historic Property. The lead agency must examine whether feasible alternatives exist that would avoid eligible cultural resources. If an effect cannot reasonably be avoided, measures must be taken to minimize or mitigate potential adverse effects.

The Corps has determined that the development and implementation of a Master Plan for management of natural, cultural and recreational resources at the Project is an undertaking as defined at 36 CFR 800.16(y) of regulations implementing Section 106 of the NHPA. Pursuant to 36 C.F.R. § 800.3(a), the Corps has determined the undertaking is not the type of activity that has potential to cause effects on historic properties, assuming such historic properties were present. The Master Plan is a planning document that deals in concepts, not in details of design or administration and it provides guidance for future development and maintenance of recreation opportunities. Any proposed project in the Master Plan that is further developed into an actual project would be reviewed on an individual basis to determine if Section 106 consultation needs to occur or if the proposed project is a routine action under the Systemwide PA that does not require Section 106 consultation.

## **7.10 NATIVE AMERICAN GRAVES PROTECTION AND REPATRIATION ACT**

*In compliance.*

The Native American Graves Protection and Repatriation Act (25 U.S. C. § 3001-131; 104 Stat. 3042) provides for the protection of Native American and Native Hawaiian cultural items. It establishes a process for the authorized removal of human remains, funerary, sacred, and other objects of cultural patrimony from sites located on land owned or controlled by the federal government. The Act requires federal agencies and federally assisted museums to return specified Native American cultural items to the federally recognized Indian tribes or Native

Hawaiian groups to which they are associated. In the event of inadvertent discoveries of human remains, artifacts, and funerary objects, the Corps of Engineers would follow the terms of the NAGPRA regulations, 43 CFR 10 et seq.

### **7.11 NOISE CONTROL ACT**

*In compliance.*

The Noise Control Act of 1972 (42 U.S.C. Sect 4901 to 4918) establishes a national policy to promote an environment for all Americans free from noise that jeopardizes their health and welfare. Federal agencies are required to limit noise emissions to within compliance levels. Noise emission levels at the Project site would increase above current levels temporarily due to construction of improvements or features identified in the proposed Master Plan revision. Appropriate measures would be taken to keep the noise level within the compliance levels.

### **7.12 EXECUTIVE ORDER 11988 FLOODPLAIN MANAGEMENT**

*In compliance.*

EO 11988 requires each agency to provide leadership and take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health and welfare, and to restore and preserve the natural and beneficial values served by flood plains in carrying out its responsibilities for (1) acquiring, managing, and disposing of Federal lands and facilities; (2) providing Federally undertaken, financed, or assisted construction and improvements; and (3) conducting Federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulating, and licensing activities. The actions identified in the proposed Master Plan revision would not affect the flood holding capacity or flood surface profiles of Priest River, Clark Fork River, Lake Pend Oreille, or the Pend Oreille River, nor would the facilitate floodplain development.

### **7.13 EXECUTIVE ORDER 11990 PROTECTION OF WETLANDS**

*In compliance.*

Federal agencies shall take action to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands in carrying out the agencies responsibilities. Each agency, to the extent permitted by law, shall avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds (1) that there is no practicable alternative to such construction, and (2) that the proposed action includes all practicable measures to minimize harm to wetlands, which may result from such use. Wetlands would not be impacted by the proposed action. A detailed review of specific actions will be completed to ensure wetland values and functions will not be affected. The proposed action does not conflict with the requirements of the EO.

### **7.14 EXECUTIVE ORDER 12898, ENVIRONMENTAL JUSTICE IN MINORITY POPULATIONS AND LOW-INCOME POPULATIONS**

*In compliance.*

Executive Order 12898 directs federal agencies to take the appropriate steps to identify and address any disproportionately high and adverse human health or environmental effects of federal programs, policies, and activities on minority and low-income populations. Minority populations are those persons who identify themselves as Black, Hispanic, Asian American, American Indian/Alaskan Native, and Pacific Islander. A minority population exists where the

percentage of minorities in an affected area either exceeds 50 percent or is meaningfully greater than in the general population.

The proposed action would not disproportionately affect minority or low-income populations nor have any adverse human health impacts. No interaction with other projects would result in any such disproportionate impacts. No cumulative impacts to Environmental Justice would be expected from interaction of the proposed action with other past, present, and reasonably foreseeable projects. Further, tribal governments that are also environmental justice communities in the project area have been engaged and informed about the proposed action.

## 8 SUMMARY / CONCLUSION

The revised Master Plan provides guidelines and direction for future Project development and use and is based on authorized Project purposes, Corps of Engineers policies and regulations on the operation of Corps of Engineers projects, responses to regional and local needs, resource capabilities and suitable uses, and expressed public interests consistent with authorized Project purposes and pertinent legislation. Careful planning, sound engineering, appropriate coordination with resource agencies and effective execution have developed the recreational resources at the Project while protecting and enhancing the important environmental resources; these practices would be expected to continue.

Section 2.4.3.3 *Development and Maintenance of Facilities and Area Lands* (of this EA) identifies a number of future actions that could be implemented by the Corps. Because the ability to implement these projects is strongly influenced by the availability of funding there are no scheduled initiation dates for these actions. If and when these projects were implemented, localized and temporary construction-related effects (e.g., diesel/gasoline engine emissions, noise, fugitive dust, minor earth-moving) would be evaluated at that time.

Based on the above analysis, this project is not a major Federal action significantly affecting the quality of the human or natural environment, and therefore does not require preparation of an environmental impact statement. A signed FONSI will complete this environmental review.

## 9 LIST OF PREPARERS

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Melissa Leslie	Environmental Analysis Section Chief, Planning, Environmental, and Cultural Resources Branch, Seattle District
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## 10 REFERENCES

- Bonner County Planning Department. 2002. *Bonner County Comprehensive Plan, Public Service, Facilities, and Utilities Component*. Sandpoint, Idaho. Available: <http://bonnercounty.us/comprehensive-plan-2/> (Accessed July 2017)
- Corps (U.S. Army Corps of Engineers). 1955. *Master Plan for Development and Management of Albeni Falls Reservoir, Pend Oreille River, Idaho*. U.S. Army Corps of Engineers, Seattle District, Seattle, Washington.
- Corps. 1971. *Engineering Regulation 1120-2-400, Recreation Resource Planning*, 1 November 1971 (Changes 1 through 3). U.S. Army Corps of Engineers, Washington D.C. Archived/Available: <https://www.law.cornell.edu/cfr/text/32/644.4> (accessed March 2017)
- Corps. 1981. *Albeni Falls Project Master Plan, Pend Oreille River, Idaho, Design Memorandum 25*. U.S. Army Corps of Engineers, Seattle District, Seattle, Washington.
- Corps. 1985. *ER 1165-2-400, Water Resources Policies and Authorities – Recreational Planning and Management Policies*, 9 August 1985. Available: <http://www.publications.usace.army.mil/USACE-Publications/Engineer-Regulations/u43546q/313136352D322D343030/> (Accessed March 2017)
- Corps. 1988. *Engineering Regulation 200-2-2, Procedures for Implementing NEPA, March 1988*. U.S. Army Corps of Engineers, CECW-CO, Washington D.C. Available: <http://www.publications.usace.army.mil/USACE-Publications/Engineer-Regulations/> (Accessed March 2017)
- Corps. 1996. *Engineering Pamphlet 1130-2-550, Recreation Operations and Maintenance Guidance and Procedures*, CECW-CO, Washington D.C. Available: <http://www.publications.usace.army.mil/USACE-Publications/Engineer-Pamphlets/> (Accessed March 2017)
- Corps. 2013. *Engineering Pamphlet 1130-2-550, Recreation Operations and Maintenance Guidance and Procedures, Change 5*, CECW-CO, Washington D.C. Available: [http://www.publications.usace.army.mil/USACE-Publications/Engineer-Pamphlets](http://www.publications.usace.army.mil/USACE-Publications/Engineer-Pamphlets/) (Accessed March 2017)
- Corps. 2017. *Albeni Falls Project Operational Management Plan, Natural Resource Section, Bonner County, Idaho*. U.S. Army Corps of Engineers, Seattle District.
- Environmental Protection Agency. 2016. *Climate Impacts in the Northwest*, published online 2016. Archived/Available: [https://19january2017snapshot.epa.gov/climate-impacts/climate-impacts-northwest\\_.html](https://19january2017snapshot.epa.gov/climate-impacts/climate-impacts-northwest_.html) (Accessed July 2017)
- IPCC (Intergovernmental Panel on Climate Change). 2001. *Climate Change 2001: Working Group I: The Scientific Basis*. World Meteorological Organization (WMO) and United Nations Environment Programme (UNEP). Available: <http://www.ipcc.ch/ipccreports/tar/wg1/001.htm> (Accessed July 2017)
- Jankovsky-Jones, M. 1997. *Conservation strategy for Northern Idaho wetlands*. Conservation Data Center, Idaho Department of Fish and Game, Boise, Idaho. Available: [https://www.tag.idaho.gov/ifwis/idnhp/cdc\\_pdf/panplan.pdf](https://www.tag.idaho.gov/ifwis/idnhp/cdc_pdf/panplan.pdf) (Accessed March 2017).



U.S. Fish and Wildlife Service (USFWS). 2013. *Endangered Species Act Section 7 Consultation Biological Opinion (61130-2010-F-0239) for U.S. Army Corps of Engineers Standard Local Operating Procedures for Endangered Species (SLOPES) for Selected Nationwide Permit Activities Affecting Bull Trout in Western Montana and Northern Idaho*. USFWS Montana Field Office, Kalispell, Montana and Northern Idaho Field Office, Spokane, Washington.

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# Appendix A

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Draft Master Plan – For the 60-day public review process, this document is a separate downloadable file due to the size of the document.

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# Appendix B

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Draft Finding of No Significant Impacts (FONSI)

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**ALBENI FALLS PROJECT MASTER PLAN**  
**BONNER COUNTY, STATE**  
**DRAFT FINDING OF NO SIGNIFICANT IMPACT**

**1. Background.** The U.S. Army Corps of Engineers, Seattle District (Corps), proposes to adopt a Master Plan for the management of natural, cultural and recreational resources at Albeni Falls Dam and Reservoir Project (AFD). The new Master Plan would be a strategic land use management document that guides the comprehensive management and development of all project recreation, natural and cultural resources throughout the life of the water resource project. The new Master Plan would outline the goals and prioritizations of the Corps' management of project lands at AFD as it fulfills its responsibilities pursuant to Federal laws to preserve, conserve, restore, maintain, manage, and develop the project lands, waters, and associated resources. The Master Plan would deal in concepts, not details, of design or administration. Detailed management and administration functions will be addressed in a 5-year Operational Management Plan (OMP), which implements the concepts of the MP Master Plan into operational actions. The analysis of the OMP would be tiered off of the Master Plan, but would undergo its own public review under the National Environmental Policy Act (NEPA).

**2. Purpose and Need.** The existing Albeni Falls Project Master Plan was completed in 1981. There has been no comprehensive revision to the Master Plan in more than 30 years. As such, the current Master Plan provides an inadequate basis with which to evaluate contemporary proposals. A number of recreational amenities envisioned and described in the 1981 document were never constructed. In addition, there have been changes in demand for recreation and expansive adjacent population growth which dictates the need to update the Master Plan for the Albeni Falls Project.

Additionally, the Corps' Master Plan policy, EP 1130-2-550 was updated in January 2013 (Corps 2013). Under the new guidance, not only was the 1981 Master Plan out of date, it no longer fulfilled the new Master Plan requirements. An updated Master Plan provides a comprehensive description of the project, a discussion of factors influencing resource management and development, identification and discussion of special problems, a synopsis of public involvement and input to the planning process, and descriptions of past, present, and proposed development, in accordance with the revised EP 1130-2-550. Projects proposed at AFD will not compete favorably for funding without an updated master plan.

The approval and adoption of the Master Plan would assure that the requirements of Corps' policies are met; comments from the public, local, state, federal agencies and

tribes on overall management approaches are addressed; and finances expended for projects listed in the Master Plan are used in a strategic manner.

**3. Alternatives Considered.** The Environmental Assessment examined 4 alternatives: 1) No Action/No Change Alternatives where the current 1981 Master Plan would remain as the primary guidance document; 2) the Preferred Alternative of adopting the proposed Master Plan would provide added detail regarding the regarding the comprehensive management for balanced cultural, natural and recreation resources and ensure responsible stewardship and use of Project lands; 3) the Maximize Natural Resource Preservation Master Plan Alternative would maximize management/preservation of all natural resources with reduced recreational development and visitor use; and 4) The Maximize Recreation Master Plan Alternative which would maximize recreation facilities development and visitor use with reduced natural resources management. Of critical importance is the need to emphasize that an approved Corps' Master Plan would be stewardship driven and must seek to balance recreational development and use with protection and conservation of natural and cultural resources. These alternatives do not consider project-wide resource capability and suitability, and are not consistent with multiple use authorized project purposes. Alternatives 3 and 4 have, therefore, been eliminated from further consideration.

**4. Proposed Action and Environmental Effects.** The Proposed Master Plan alternative would seek to replace the 1981 Master Plan, balancing recreation/visitor use with conservation of natural resources. The updated Master Plan would address important updates in response to changes in regional demographics, recreation use and demand, amenities within the project, current environmental conditions, and pertinent laws and policies. The Preferred Alternative would provide strategic comprehensive management and development of all project recreational, natural, and cultural resources throughout the life of the Corps project. It would also guide planning for efficient and cost-effective management and development for comprehensive use, responsible stewardship, and sustainability.

The probable consequences (impacts and effects) of the preferred proposed Balanced Master Plan (Alternative 2) on Project recreation, environmental and cultural resources were evaluated. The Master Plan is a conceptual planning document that does not direct specific action, such as ground disturbing activities that would cause direct impacts to natural and cultural resources but provides guidance for planning future work based on meeting resource objectives.

Under Alternative 2, proposed Balanced Master Plan, future management changes would improve management programs and process, resulting in beneficial impacts for forest, wildlife, water quality and aesthetics. Beneficial effects of strategic project planning would result in maximization of project funds. Although major work is not proposed in the future, improving some existing facilities, a number of small-scale actions or developments are proposed under the updated Master Plan. The proposed Master Plan would enable more efficient land management and the

recreation needs of the public would be better accommodated. Future recommendations would be based on review of existing facilities, resource suitability, carrying capacity, environmental and social effects, trends and forecast of future demands. Beneficial impacts on recreation would come from modernization and upgrading existing facilities, but also from increasing management of natural resources. Altering and updating the category of certain lands out of recreation and into wildlife would result in benefit to species use of the property. Actual effects of projects will be evaluated in the OMP and project specific NEPA documents. Routine operation and maintenance activities would have minor or no impacts when using best management practices.

The No Action/No Change Alternative was rejected as not complying with EP 1130-2-550, being outdated as to current needs and uses at AFD, and for reasons described in the environmental documentation accompanying this Finding of No Significant Impact (FONSI).

**5. Public Involvement.** The proposed action has been coordinated with appropriate Federal, federally recognized Tribes, state, and local agencies, and businesses, organizations, and individuals. The development of the Master Plan was presented at three meetings open to public: 1) Bonner County Waterway Committee (February 16, 2017), 2) AFD Operations Public Meeting (August 7, 2017), and 3) Pend Oreille Basin Commission Meeting (August 25, 2017). A 30-day announcement for project scoping was provided to local papers and sent out via email on April 5, 2017. The Corps sent scoping letters to 47 individuals, businesses, organizations and agencies, encouraging the submission of ideas and comments regarding management of natural, cultural and recreational resources to be included in the proposed Master Plan. One response letter was received from the Idaho Department of Fish and Game. The Draft Environmental Assessment and Draft Master Plan will be made available for a 60-day public review and comment period via emails to stakeholders/interested citizens and posting on the Corps public website. Comments received will be addressed in the final Environmental Assessment.

**5. Finding.** Based on the analysis described above and provided in more detail in the Environmental Assessment, this project is not a major Federal action significantly affecting the quality of the human or natural environment, and therefore does not require preparation of an environmental impact statement.

DRAFT

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Date

DRAFT

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MARK A. GERALDI  
Colonel, Corps of Engineers  
Commanding